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SPECIAL REPORT

ON

THE SYSTEM OF EDUCATION

IN

Vol. III

ONTARIO.

(Sectional Reprint from Vol. IV. of "Special Reports on Educational Subjects.")

ONTARIO COLLEGE OF EDUCATION
DEPT. OF EDUCATIONAL RESEARCH
UNIVERSITY OF TORONTO

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SPECIAL REPORT

ON

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INTRODUCTORY NOTE.

The following Report is reprinted from Vol. IV. of the 'Special Reports on Educational Subjects" published in April, 1901. It was prepared by the Special Inquiries Section of the Board of Education from official documents supplied by the Education Department of Ontario, in response to an invitation of the Lords of Committee of Council on Education, transmitted in 1897 by the Secretary of State for the Colonies.

The contents-tables and prices of the volumes of "Special Reports on Educational Subjects" already published will be found at the end.

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August, 1901.

THE SYSTEM OF EDUCATION IN ONTARIO.

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THE SYSTEM OF EDUCATION IN ONTARIO.

[NOTE.—Part I. of this Report consists in the main of extracts from the official handbook to the educational system of the Province, written in 1893 by Mr. John Millar, now Deputy Minister of Education. This useful book is entitled "The Educational System of the Province of Ontario." A copy of it was specially furnished by the Education Department of Ontario for the purposes of this Report.

Appendices C, D, E, F, and G have all been taken from the same work; and Appendix A is part of an official document also supplied by the Education Department.

Part II., which deals only with the state of education in the Province in 1899 (as well as Appendix B, which gives certain recent regulations), has been compiled from the admirably arranged "Report of the Minister of Education for the year 1899," also furnished by the Ontario Education Department.

Part III. consists of statistical tables for the school year 1898, selected from among those given in the Appendix to the Report for 1899.]

PART I.—GENERAL DESCRIPTION OF THE SYSTEM.

INTRODUCTION.

"From the earliest settlement of Ontario," writes Mr. Millar in his account of the Educational System of the Province, "schools were established as the wants of the inhabitants required." . . . "The Legislature soon recognised the needs of the country, and made grants of land and money in aid of elementary, secondary, and superior education. Statutes were passed from time to time for the purpose of opening schools to meet the demands of the people. The sparsely settled condition of the Province delayed for a while the organization of the system. It was not until 1844 that the elementary schools were put on a comprehensive basis. In that year the Rev. Egerton Ryerson, LL.D., was appointed Chief Superintendent of Education, and the report which he presented to the House of Assembly sketched in an able manner the main features of the system of which he was the distinguished founder, and of which he continued for thirty-three years to be the efficient administrator. In 1876 the office of chief superintendent was abolished, and the schools of the Province placed under the control of a member of the Government with the title of Minister of Education. In this way they have been since administered, and such improvements as have been considered necessary have been made from time to time by means of amendments to the school law and regulations of the Education Department."

Central Administration.

N.B.—Recent reports of the Minister of Education and other documents relating to education in Ontario may be seen at the Board of Education Library, St. Stephen's House, Cannon Row, Whitehall, London, S.W.

This Department consists of the members of the Executive Government; and its head, as already stated, is the Minister of Education. Subject to the provisions of any statute in that behalf, and the regulations of the Department, there may be established the following schools:—(1) Kindergartens, (2) Public Schools, (3) Night Schools, (4) High Schools, and Collegiate Institutes, (5) Art Schools, (6) County Model Schools, (7) Normal Schools, (8) Schools of Pedagogy, (9) Teachers' Institutes (10) Mechanics' Institutes, (11) Industrial Schools.

"It is the duty of the Minister to direct all the educational forces in the country; first from his place as a member of the Legislative Assembly, and secondly through the officers of his department. From the discussions of educational questions in the provincial parliament his position as a member gives him the best facilities for recognising the working of the school law, and ascertaining the trend of public opinion. As the head of his department his constant official intercourse with trustees, inspectors and teachers, gives him the greatest opportunity for prescribing from time to time whatever amendments to the regulations may be considered wise in the interests of high and public schools. From the wide sweep of the legislation which he is expected to direct, and from his position as a member of the Government responsible to the people's representatives, he is able to advance such legislation as will guard the unity of the system and preserve its symmetry."

"Ontario may claim to have some features of her system that are largely her own. Among them may be mentioned: a division of state and municipal authority on a judicious basis; clear lines separating the function of the university from that of the high schools, and the function of the high schools from that of the public or elementary schools; a uniform course of study; all high and public schools in the hands of professionally trained teachers; no person eligible to the position of inspector who does not hold the highest grade of a teacher's certificate, and who has not had years of experience as a teacher; inspectors removable if inefficient, but not subject to removal by popular vote; the examinations of teachers under provincial instead of local control; the acceptance of a common matriculation examination for admission to the universities and to the learned professions; a uniform series of text books for the whole Province; the almost entire absence of party politics in the manner in which school boards, inspectors and teachers discharge their duties; the system national instead of sectarian, but affording under constitutional guarantees and limitations protection to Roman Catholic and Protestant separate schools and denominational universities."

Local Administration.

"The municipal system of Ontario affords a full measure of local self-government. The province is for the most part divided into counties, which are subdivided into minor municipalities, consisting of townships, and of incorporated villages, towns, and cities. These corporations are given certain powers, and have certain responsibilities with respect to education. Through their muni-

cipal councils counties are under obligation to make grants of money to high schools, and both counties and townships must contribute certain sums in aid of public schools. Each township is divided into school sections and each of these sections is provided with a public school. There is a board of trustees for each school section, incorporated village, town, and city. Much the greater part of what is expended for public schools is provided by the school section, village, town, or city. The ratepayers (men and women) elect the trustees, who, within the provisions of the provincial statutes or regulations of the Education Department, appoint the teachers and determine the amounts to be expended for buildings, equipments, and salaries. It thus follows that the system of education in Ontario is essentially democratic, and in those matters which affect the sentiments or touch the pockets of the people, each locality has almost entire control. It is not, however, considered wise to decentralise as regards the granting of certificates to teachers and inspectors, the authorising of text-books, the fixing of courses of study, and the prescribing of the duties of trustees, inspectors, and teachers. These are questions which, though still under the control of the people, are regulated by a responsible government."

The School and the Churches.

"There is no established church in Ontario, or connection between Church and State. The constitution gives the Province control of its educational affairs, and the great majority of the people believe that schools and colleges should be non-denominational. No religious body has any voice in the management of the high and public schools, or the university. . . . They are institutions of a Christian people. The doctrines of no church are taught, but the principles of Christianity form an essential feature of the daily exercises. . . The co-operation of the clergy of all denominations in educational gatherings is quite common, and recognition of religion is fully shown in the regulations which have been prescribed by the Education Department."

I. Primary Education.

Kindergartens

"By the Public Schools Act each Board of Trustees in cities, towns, and incorporated villages has power to establish kindergartens for children between the ages of four and seven years. The system has been introduced into all the large cities and into many of the principal towns. Each of the provincial normal and model schools in Toronto and Ottawa has also a kindergarten, with two regular teachers on the staff, assisted by those taking the training course. In all these schools the principles of Froebel's system are followed, and the effect has been to create much interest in this method of training young children. A small fee is generally charged, and the cost has to some extent militated against their establishment. Experience has, however, shown that the expense need not be high. A genuine kindergartner can, with the aid of her assistants in training, superintend from fifty to one hundred children, provided she begin with no more than twenty, adding ten or twenty more as she gets an assistant

ready to take charge of them. These pupil teachers are not paid, and may not become teachers, as it is held that all women should learn to interest and train young children according to the Froebelian methods. It is found indispensable to the success of a school of the kind that the mothers of the community should take a lively interest in the training thus given to their children. Where this is the case, and a good kindergartner employed, cheerfulness, intelligence, activity, and a fondness for the school work are aroused among the pupils. At the normal kindergartens many visitors, especially ladies, are present almost daily, and wherever these institutions are established the results are quite observable in the superiority of the public schools."

In 1898 the province had 116 kindergartens attended by 11,083 pupils. 240 teachers were employed.

Administration.

"Townships are divided by their municipal councils into sections, and each of these has its own school (a few have two schools) managed by a board of three trustees, who hold office for three years—one going out of office annually, when his successor is elected. A grant of money is paid by the Government to each school according to the average attendance of pupils, and the county council is obliged to make an equal appropriation. In addition the township council must give a grant of 100 dollars (150 dollars if two teachers are employed) to each school, and the ratepayers of the section are taxed to raise whatever further sum the trustees require to maintain the school. Since 1871 the schools have all been free."

"Cities, towns, and incorporated villages in Ontario also receive their share of the legislative grant for public schools and the balance necessary is raised by the municipal council at the request of the board of trustees. The public school board consists of six or more members, two elected from each ward, of whom one retires annually. If the board so decides, the elections may be held by ballot, and on the same day as the municipal elections. The graded system of classification ,under the direction of the principal or inspector, is adopted, and promotions are usually made twice a year. As in rural schools, the public schools are all free, and free text books, under the Act of 1891, may also be provided by the trustees in cities, towns, and villages, or each pupil may be charged a small fee for their purchase. Night schools and kindergartens may also be established."

"Trustees have extensive duties. To them is largely entrusted the amount of money to be expended for school sites, buildings, equipment, and maintenance. They select the teachers and determine the number, grade, and description of schools to be established and maintained. In cities and towns the boards have erected a large number of very handsome school buildings furnished with the latest improvements as to heating and ventilation, maps and apparatus, and provided with furniture of the most modern character."

Compulsory Education.

"It is assumed that the parent as well as the State has duties to perform regarding education. The parent is not denied the right to have his children educated at a private school, a church school or college, or a denominational university, but, if he so

decides, he is not thereby relieved of his duty in the way of paying his share towards the support of the institutions sustained, or partly sustained, by the State. It is held to be the duty of the state to provide free elementary schools. . . . All persons are taxed to support education, because its general diffusion is for the public good. It is held that compulsory education is a necessary corollary of free education. If the state gives the boon of free schools to all, it has a right to see that the expected advantages are realized. On this principle the Truancy and Compulsory Education Act of 1891 was passed. . . . By this Act all children between the ages of eight and fourteen are obliged to attend school for the full term during which the school is open, and parents or guardians who fail to send their children are subject to penalties. The rights of conscience are sufficiently guarded. Penalties are not inflicted if the child is under efficient instruction at home, or unable to attend through sickness or other unavoidable cause, or is excused by a justice of the peace, or by the principal of the school, or if he has passed the high school entrance examination. Any person employing a child under fourteen years of age during school hours is liable to a penalty of twenty dollars. When the services of a child are deemed urgent, an absence from school for six weeks of the term may be granted. Provision is made for sending a child who is vicious or immoral to an industrial school. To nip truancy in the bud is regarded as the most effective means of preventing a recourse to the penalties of the Act. Truant officers must be appointed for every city, town, and incorporated village, and may be appointed for every school section. These officers are vested with police powers, and have authority to enter factories, workshops, stores, and other places where children may be employed, and ascertain whether there is any violation of the Act. Regulations may be made by the local authorities for the better enforcement of the statute. The truant officers must report annually to the Education Department according to prescribed forms."

"The public school has usually five successive classes, but in the case of towns in which instruction is given in the lowest class of the high school without the imposition of any fee, it is not compulsory on the public school board to maintain a fifth class in the primary school.

Subjects of Instruction

"There is a fixed course of study for each of the five classes, of the ordinary public school, which will be found in detail in Appendix A (Regulations of the Educational Department, Schedule A). It includes the following subjects:—Reading, Writing, Arithmetic, Grammar, Geography, History, Drawing, Music, Physiology, and Temperance.

Leaving Examinations.

"Public School Leaving Examinations are held each year, at the same time as the High School Entrance Examinations, for those pupils who take up fifth form work. The main object of this regulation is to afford the pupils of rural schools who cannot conveniently attend a high school an incentive for higher work. Only those pupils are eligible for this examination who have

passed the entrance examination, or who have made at least the total number of marks required, and are recommended by the principal of the public school. The examination papers are prepared by the Education Department, and the questions are based upon the following subjects:—Arithmetic and Mensuration (value 200), English Grammar and Rhetoric (150), English Poetical Literature (150), English Composition (100), History (100), Geography (100), Book-keeping and Penmanship (100) Drawing (50), Reading (50); there are besides two optional papers, each valued at 75, one of them being on Temperance and Hygiene and the other on Agriculture. The standard required is one-third of the marks in each subject and one-half of the total marks obtainable. To meet the cost of the examination a fee of one dollar is required of each candidate, and the papers are read by the Inspector and the Principal of the county model school. Any public school pupil who has passed the high school Entrance Examination may be a candidate, and a special grant is made by the Legislature for those schools that successfully prepare pupils for this examination. No grant is, however, paid to a school in a city, town or village where there is a high school, as it is not deemed desirable for such schools to take up this work. To prevent the junior classes from being neglected it is necessary that at least two teachers be employed, and as a guarantee of ability to undertake the course, the principal must hold at least a second-class certificate."

Statistics (for 1898, unless otherwise stated).

Population of Ontario (1891), 2,114,321; school population 591,300. Total number of registered pupils, 478,194 (under 5 1,387; between 5 and 12, 476,584; over 12, 223). Average attendance, 273,451. Percentage of average attendance to total number attending school, 57.

Classification of pupils. In 1st Reader, Parts I. and II., 179,360 2nd Reader, 90,624; 3rd Reader, 97,693; 4th Reader, 89,670 5th Reader, 20,847

Number of pupils learning writing, 464,460; arithmetic 469,603; drawing, 447,813; geography, 343,759; history, 245,370; grammar and composition, 313,637; temperance and hygiene 219,776.

Total number of public school houses, 5,587, of which 2,374 were brick, 487 stone, 2,355 frame, and 371 log.

Number of teachers employed in the public schools, 8,465 (male 2,656, female 5,809). Of these 3,585 have attended a normal school; 476 hold provincial first-class certificates or first-class certificates of the old County Board; 3,414 hold one or other type of second-class certificate; 4,333 hold third-class or other certificate.

In the public schools the highest salary paid to a teacher was 1,500 dollars; the average salary of male teachers 396 dollars and of female teachers 293 dollars.

Separate Schools.

"The Roman Catholics of Ontario have certain educational privileges guaranteed to them by the Act of Confederation. All ratepayers, no matter what may be their religious belief, are, however, liable to pay public school rates, unless, in the manner provided they become separate school supporters. The term

'separate schools' applies to Protestant and coloured persons as well as to Roman Catholics. As a matter of fact, the exception to the general public school system is confined chiefly to Roman Catholics, who desire to establish separate schools in localities where their supporters are sufficiently numerous for the purpose. It is provided that any number of heads of family, not less than five, being residents of the place and Roman Catholics, may unite and establish a separate school. Such ratepayers are required to give notice to the clerk of the municipality of their intention to become separate school supporters, and they are then exempted from the payment of rates towards the public school until they give a contrary notice to the same municipal officer. It is optional with a Roman Catholic whether he continues to be a public school supporter, but in cities and towns where separate schools have been established most Roman Catholics have become supporters of these schools. In a few of the rural districts, and especially in Eastern Ontario, where there is a considerable French element, a number of separate schools have been formed, but in most counties of the Province the large majority of the people are Protestant, and very few separate schools have been established.

"The separate schools are all under Government inspection and are generally conducted in accordance with the same regulations as the public schools. Like the latter, they are under the control of boards of trustees, who are elected by the separate school supporters. The teachers, except those who are members of certain religious orders, are required to comply with the same regulations in order to receive certificates. The course of study pursued by the pupils is nearly the same as that for the public schools, and the text books, except those for religious instruction, are in many instances the same. Separate school pupils pass the same entrance examinations as public school pupils for admission to the high schools, and both classes of schools share in the legislative grant in proportion to the attendance."

STATISTICS OF SEPARATE SCHOOLS.

(i.) Roman Catholic.

—	Schools Open.	Total Receipts.	Total Expenditure.	Number of Teachers.	Number of Pupils.
1898	345	$389,185	$349,481	744	41,667

(ii.) Protestant.

—	Schools Open.	Total Receipts.	Total Expenditure.	Number of Teachers.	Number of Pupils.
1898	8	$5,567	$4,895	12	505

Training of Teachers.

"One of the most valued features of the system of education in Ontario is the extensive provision made for the training of teachers. Every position from the lowest in the kindergarten to the highest in a collegiate institute must be filled by a trained teacher. No teacher of a high or public school receives a permanent certificate who does not possess qualifications of a threefold nature —(1) scholarship, (2) a knowledge of pedagogical principles, and (3) success shown by actual experience.

"Among educationists it is now fully admitted that scholarship alone does not fit a person to undertake the duties of a teacher. Just as the lawyer, doctor or clegyman receives professional training at a school of law, medicine or theology, so it has come to be admitted that the teacher should acquire special training at a normal school or a school of pedagogy. It was formerly customary for the candidate for the teaching profession to obtain his special training at the same time that he acquired his literary and scientific attainments. Under this system, normal schools undertook non-professional as well as professional work, and chairs of education were established in universities whereby the undergraduate in arts might receive such instruction in the science of education as would enable him as a newly-fledged B.A. to take charge of a school. In Ontario there is a clear separation of the professional from the academic courses. It is assumed that the professional training of a teacher should be taken up *after*, and not in conjunction with, the acquisition of knowledge at a high school or university. . . .

"A person who desires to become a teacher must first pass the ordinary departmental or university examinations which will be hereafter described. In this respect his course is nearly similar to that of the student who wishes to take up any other profession. He takes up his English Literature, his Algebra, his Botany and his Latin in the same class in school or college with those who intend to become farmers, mechanics, or editors. The successful candidates at the same university examinations are admitted a few month afterwards without any further non-professional tests—some to a course in law, some to a medical school, some to a theological college, and others to an institution for the training of teachers. To train students how to teach is not, it is held, the province of university or high school, and the graduates of these institutions, no matter how high their scholarship, could not, on the strength of their diplomas, hold positions as teachers. It is contended that a professional school should not be expected to give instruction in the ordinary branches taught in school or college, and that its functions are better discharged, and discharged in shorter time, when its students, before being admitted, have finished their course at university or high school.

"Another feature which characterizes the system of training teachers in Ontario is the value attached to experience. It is assumed that a person may pass his university examination, and, after taking a course at a training school, fail when in charge of his own school. It is held that the course for teachers-in-

training at an ordinary practice school, though valuable, must necessarily be surrounded by conditions more or less artificial; that there cannot be given training in many points of discipline, and that the lack of continuity in the teaching done by students stands in the way of an estimate being made of their ability to bring on pupils. It is further contended that there are other necessary qualifications for a teacher which can be acquired or tested only by actual experience; that a teacher must learn how to govern himself, to 'get on' with pupils, parents, and trustees, and to show that he is capable of exercising a large amount of 'common sense.' For such reasons it is provided that no permanent certificate is given to any high or public school teacher who has not in the opinion of his inspector proved himself successful. The lowest grade of certificate is valid only for three years, and the holder who fails to 'work up' for one of a higher grade or who, in spite of his scholarship or professional training, shows that he has mistaken his calling, is obliged to give way and allow his position to be held by another. It is moreover felt that in a large graded school, where important administrative ability is required, the principal should have first shown his efficiency in a subordinate position. On this ground the B.A. who has received his professional certificate after attending the School of Pedagogy must serve as an assistant for at least two years in a high school or collegiate institute before becoming eligible for a head master's certificate. In other words, a high school teacher must serve an apprenticeship for two years before he can get the highest grade of certificate, and the public school teacher has a similar period of probation before he can secure a first class certificate. There is, at the same time, every incentive held out to the energetic teacher to rise in the profession. Many of the best positions as teachers, and nearly all the positions as inspectors, are held by those who started at the lowest step of the stairs.

"In the establishment of training schools it is assumed that the different grades of schools—kindergartens, public schools and high schools—require teachers of different qualifications, whose professional attainments should be gained at institutions specially provided in each case for the purpose. With this view there have been established in Ontario the following training schools for teachers:—

"(1.) Kindergartens, including the local schools of this kind where the training is given for assistants' certificates, and the provincial kindergartens connected with the normal schools where the training is given for directors' certificates.

"(2.) County Model Schools, where all public school teachers receive their first professional training, and from which third class certificates, valid for three years, are awarded.

"(3.) Provincial Normal Schools, for the further training of public school teachers who desire to obtain second class certificates, which are valid for life.

"(4.) The School of Pedagogy, for the training of those who desire

to obtain certificates as first class public school teachers, assistant high school teachers, and specialists in one or more of the six departments of Classics, Mathematics, English, Modern Languages Natural Science, and the Commercial Course. The School of Pedagogy also gives the professional training which, with the necessary scholarship and experience, enables its graduates to obtain subsequently certificates as public school inspectors or principals of high schools and collegiate institutes.

Kindergarten Teachers.

"A young woman who desires to become a regular teacher in a Kindergarten must take one year's training at some local school of the kind which has been established by a public school board. If she is intelligent, fond of young children, and ready to read such literature as bears on her work, an extensive preliminary course at a high school is not essential, but she will be all the better qualified by having first attended one for three or four years. After the year's training an examination must be passed, conducted by the Education Department; but the certificate gained only qualifies to teach as an assistant. The holder of such a certificate becomes, however, eligible to attend either of the normal Kindergartens at Toronto or Ottawa, and a year's additional course there is required in order to obtain a certificate as director. This certificate qualifies her to take charge of any Kindergarten established by a board of public school trustees."

County Model Schools.

"To begin teaching in any public school in Ontario it is necessary to obtain what is called a third-class certificate from a county board of examiners, and only those are eligible for the examination who have attended a session at a county model school. To be admitted to a course of training at one of these institutions it is necessary to have first passed the high school primary examination. The board of examiners consists of the public school inspector and two other persons appointed by the county council holding first-class certificates and actually engaged in teaching. They receive for their services 4 dollars per diem and travelling expenses. This board, subject to the regulations of the Education Department, sets apart at least one public school in each county for the training of third-class teachers. The course of study for the pupils is the same as in any other public school. There are 59 county model schools in Ontario, and the average number of students-in-training at each is about 30. A grant of 150 dollars by the Legislature and an additional 150 dollars by the county council are made to each of these institutions, mainly to assist the trustees to provide an efficient staff. The course of professional training extends over about four months—from September to December. The time of the teachers-in-training is taken up with (1) observation of the work done by the regular teachers, (2) practice lessons given to the classes or to sections of a class, and (3) criticisms, discussions of methods, and lectures by the principal on pedagogical principles. A third-class certificate is valid for only three years, and if the holder has by that time no higher non-professional attainments than a high school primary certificate, or if he has not been successful in teaching, he is not eligible to enter a normal

school, and may be obliged to retire from the profession. This regulation is based on the principle that a life certificate should be given to no teacher until he is tried by the only true test—that of experience. The object is to prevent incompetent persons from holding positions, and by offering their services at low salaries, shutting out energetic teachers and injuring the schools.

"It was intended that as far as possible third-class teachers should be assistants, and the intention has been observed in cities and towns, but the supply of second-class teachers is not yet sufficient to confine third-class teachers to subordinate positions in rural districts, where there is often only one teacher in each school. It is, however, quite common for third-class teachers to have passed the junior leaving or even senior leaving examination before attending a county model school, and the good education thus gained by a three or four years' previous attendance at a high school or collegiate institute gives even to rural schools a class of young men and women earnest in their work."

Normal Schools.

"To have a permanent licence to teach in a public school it is necessary to obtain at least a second-class certificate. This certificate can be secured only by teachers who have attended the normal school and passed an examination at the close of the session. The examination, which is both written and practical, is conducted by inspectors appointed from time to time by the Minister of Education. In addition to these tests a favourable report from the principal of the normal school is also essential.

"Two normal schools, with large model or practice schools as adjuncts, have been established, one in Toronto and the other in Ottawa. There are two sessions each year, and only those students are admitted who have passed the high school junior leaving examination, and who have, as reported by the inspector under whom they have served, taught successfully one year as third-class teachers. It is customary, however, for the students to have taught two or three years before being admitted to the normal school. With this experience in their own schools, after having had their preliminary professional training at a county model school and with the scholarship gained previously by three or four years' attendance at a high school or collegiate institute, the teachers-in-training of the normal schools occupy valuable vantage ground in the acquisition of pedagogical knowledge and professional skill. In order still further to confine their attention during the session to practical work and the discussion of principles and methods, a preliminary entrance examination must be passed on most of the books prescribed for the course.

"The work of the pupils of the model schools is in harmony with that of ordinary public schools and several of the early weeks of the session are partly employed by the normal school students in observing the teaching done by the regular teachers. Subsequently they are required to take charge of the model school classes under the immediate direction and criticism of these teachers and with the advantage of lectures from the masters

of the normal schools on Psychology, the Science and History of Education, and the application of the general principles of Pedagogy to the methods of instruction peculiar to each branch of study. The important aim of the normal school course is not to train teachers to become imitators, but rather to encourage individuality and self-reliance, not to cause them to become mechanical, or the slaves of methods, but to lead them to understand the principles upon which all good teaching and school management are based. About 100 students attend each normal school every session."

Inspection.

"The system of Education in Ontario makes provision for a thorough inspection of all classes of schools. School inspection is needed (1) to enforce the general rules and regulations sanctioned by the school authorities, and (2) to see that the proper methods of instruction are employed and that the teaching is made effective. In order to secure proper supervision it is necessary that the inspector should be well qualified, and that he should be invested with sufficient authority to enforce the prescribed regulations. It is assumed that no person is qualified for this important position who is not possessed of a wide range of scholarship, and who has not had several years of experience as a teacher. Without the latter, there can be no guarantee of fitness to deal with the many details of school management, and without the former there would be a lack of that culture and broadness of view which scholarly attainments are presumed to give. The public school inspector requires a knowledge of the work of elementary schools. Experience gained only in a high school will not suffice. The following is the regulation regarding the qualifications of public school inspectors:—

> Any person with five years' successful experience as a teacher, of which at least three years shall have been in a public school; who holds either specialist's non-professional standing obtained on a University examination, or a Degree in Arts from any University in Ontario, with first-class graduation honours in one or more of the other recognized departments in such University; and who has passed the examinations of the Ontario Normal College for a specialist's certificate, shall be entitled to a certificate as an inspector of public schools.

"It is not deemed expedient to have these officers elected by a popular vote. Other elements than those of fitness might then determine the appointment. The high qualifications required limit the number of candidates and shut out the ordinary 'office seeker' from the list of applicants. County inspectors are appointed by the county councils, and city inspectors by the public school boards. When a vacancy occurs, the position is generally filled by appointing some teacher with the prescribed qualifications, who, by ability and application, has gained a reputation in his profession.

"The removal of an inspector seldom occurs. It is provided that the county or city inspector cannot be dismissed except by a two-thirds vote of the council or board appointing him, unless for misconduct or inefficiency, in which case he may be dismissed by a majority vote, or by the Lieutenant-Governor in Council. It is quite customary for inspectors to hold their positions for

more than twenty years, and when they keep themselves abreast of the educational progress of the country they become more useful with increased experience. By his intercourse with the members of the municipal councils, trustee boards, and the teachers of his district, the position of an inspector is a most important one for exercising through his scholarship, professional attainments, and character a valuable influence upon the pupils of the public schools.

"The statute requires each municipal council of a county to appoint an inspector of public schools. If there are more than one hundred and twenty schools in the county the council must appoint two inspectors. The salary of county inspectors varies from about 900 to 1,600 dollars according to the number of schools. The minimum rate is 10 dollars for each teacher, and 5 dollars of this is paid by the Legislature. In cities, if there are more than three hundred teachers, two inspectors must be appointed. In some of the smaller cities and most of the towns the county inspector is also inspector of the city or town schools. It is usual in these places for the principal to perform many duties pertaining to the organization of the schools that would otherwise be discharged by the inspector.

"In the larger cities, where the inspector devotes all his time to the service of the board, the salary varies from about 1,200 to 3,000 dollars, the Legislature allowing, as in the case of county schools, 5 dollars for each teacher.

". . . In the system of education for Ontario there has been a judicious division of responsibilities among different authorities. What has largely added influence for good to the position of inspector is the fact that he is free from many of the duties assigned to such an officer in some other countries. He has nothing to do with the authorization of text books or the fixing of courses of study. He does not engage the teachers, but in rural schools it is quite customary for trustees, in selecting teachers, to seek his advice. In cities his recommendations are almost invariably sought by the committee of the board to whom the selection of teachers is assigned, and it rarely happens that the trustees ignore his opinion on a matter of this kind.

"The inspector is not required to undertake the responsibility of licensing teachers in Ontario. By entrusting this duty to a board of examiners he is saved from the 'pressure' that might otherwise be brought to bear on him to grant certificates. He has, however, as chairman of the board of examiners, a proper influence in preventing incompetent persons from entering the profession, and without his approval no teacher in his inspectorate can attend a normal school, It therefore follows that inspectors have power to block incompetent teachers from receiving permanent certificates.

"The inspector is also relieved from a more embarrassing responsibility—that of determining the academic qualifications of applicants for teachers' certificates. This duty is entrusted to a board of examiners, acting not under local, but under provincial authority. The aim has been to place the inspector in such

a position as will enable him to give his best thoughts and efforts to the most important duties of school supervision and to have his tenure of office so secured that he need not fear being disturbed so long as he discharges his duties energetically, honestly, and judiciously.

Teachers' Institutes.

"The Educational Association of Ontario has been in existence for more than thirty years, and meets during the Easter holidays for the reading and discussion of papers relating to various questions of educational interest. The meetings of this body have done much towards giving direction to the school legislation of the Province. The association may be regarded, in fact, as an 'Educational Parliament.' It receives a grant of 200 dollars a year from the Legislature, and its proceedings are published for the information of its members. Besides the sessions of the general association, very many valuable papers are read and discussed in sections of that body. In this way there have been organized sections for the kindergartners, public school teachers, high school teachers, training school teachers, inspectors, etc. There have also been formed associations for the advancement of classics, mathematics, modern languages, and science. The high and public school trustees have organized a provincial association which has, in like manner, contributed much to the discussion of educational questions. It is now a section of the general 'Educational Association.'

"Besides the provincial association, there is organized in each county or inspectoral district a 'teachers' institute' for the purpose of imparting instruction in methods of teaching, and for discussing educational matters, subject to the regulations of the Education Department. A grant of 25 dollars is paid by the Legislature to each institute, and the county or city gives a grant of an equal amount. Many of the associations have valuable libraries of professional works. The public school inspector takes a leading part in the work of these county associations, and he is generally aided by the more experienced public school teachers, and the teachers of the one or more high schools or collegiate institutes situated within his district. A director of teachers' institutes, appointed by the Education Department, frequently attends these meetings, and very often other prominent persons are invited to give addresses on educational topics. The main object, however, is to have discussed pedagogical principles and methods of teaching, and to enable teachers to 'compare notes' regarding their daily duties. Dr. Arnold, of Rugby, felt it to be necessary that his pupils should 'drink from a running stream rather than from a stagnant pool.' . . . In cities these associations often meet monthly under direction of the inspector. Sometimes he finds it desirable to have teachers of the same grade meet together. These institutes have also had the effect of creating greater interest in school work among the general public."

II. Secondary Education.

High Schools.

"With the approval of the Lieut.-Governor in Council high schools may be established by the council of any county, in any municipality containing not fewer than one thousand inhabitants. If two or more municipalities form a district, with an adjacent incorporated village, a high school may be established in such district if it contains at least three thousand inhabitants. Each district is, however, generally confined to one municipality. The municipal council of a city may establish as many high schools as it may deem expedient, subject to the approval of the Lieut.-Governor in Council. The following are the requirements of a high school, and the Government grant may be withheld if its efficiency or the requirements are not maintained:—

(1) No connection with a public school as regards premises.

(2) A site of at least half an acre in extent, well fenced, well drained, planted with shade trees, and suitably provided with walks in front and rear.

(3) A playground, and all other necessary provision for physical exercise.

(4) A well or other means of supplying pure drinking water.

(5) Water-closets for the sexes, separate and in separate yards, and properly screened from observation.

(6) A building large enough to provide ample accommodation for every pupil in attendance, with all necessary provision for light, heat, and ventilation, and two entrances with covered porches.

(7) Suitable separate cloak rooms for boys and girls, furniture, desks, black-boards, and maps, apparatus, and library of reference of the maximum value recognised for schools with two masters.

(8) A principal, and at least two assistants.

Collegiate Institutes.

"Collegiate institutes are nearly the same as high schools as regards the regulations by which they are governed. They receive larger grants from the Legislature in view of the superior equipment required for their establishment and the necessity of employing teachers of higher attainments, and a greater number of them, than for high schools. The following is the provision of the statute under which a high school may become a collegiate institute:—

On the report of the Minister of Education, and subject to the regulations of the Education Department, any high school having (1) suitable school buildings, out-buildings, grounds and appliances for physical training; (2) a library, containing standard books of reference in the subjects of the high school curriculum; (3) a laboratory, with the necessary chemicals and apparatus for teaching the elements of the sciences; (4) a staff of at least five teachers, four being specialists, one in each of the following departments: Classics, Mathematics, Natural Science, Modern Languages, including English, and any one of the staff being a specialist in the Commercial Department; (5) such other assistants as will secure thorough instruction in all the subjects on the curriculum of studies approved by the Education Department for collegiate institutes; may be constituted a collegiate institute by order of the Lieutenant-Governor in Council.

"The regulations also provide:—

(1) No high school shall be raised to the status of a collegiate institute without such a minimum equipment in the way of library, physical and chemical apparatus, gymnasium, maps and globes, as is the maximum recognised for high schools with three or more masters."

(2) Any collegiate institute that fails to comply with the conditions prescribed herein for the status of a collegiate institute may, on the joint report of the high school inspectors, be reduced to the rank of a high school, and deprived of the special legislative grant, at the discretion of the Minister of Education."

Trustees.

"Each high school or collegiate institute is managed by a board of trustees, whose duties are similar to those of public schools. Each board consists of at least six trustees, and, except in the case of cities and towns separated from the county, three of these are appointed by the county council, and three by the council of the town or village where the high school is situated. If the district is composed of more than one municipality, then each of these municipalities is represented on the high school board. In towns separated from the county all the trustees are appointed by the town council. In cities the council also appoints all the trustees, and if two high schools are established, twelve trustees are appointed, and if more than two, the council appoints eighteen trustees. Each trustee so appointed holds office generally for three years. Two other trustees holding office for one year may be added, one by the public school board and the other by the separate school board of the city, town or incorporated village where the high school or collegiate institute is situated. High school trustees cannot be members of the municipal council."

Finance.

"The cost of each high school and collegiate institute is made up of the expenditure required for 'Permanent Improvements' and 'Maintenance.' The former of these must be met entirely by the district or municipality, and consists mainly of the expenditure for school site, building, furniture, and equipment. The latter consists of the usual outlay for the salaries of teachers and other officers, repairs, fuel, stationery, and sundry expenses for ordinary school purposes, and is met from four sources, viz.: (1) Government grants; (2) county grants; (3) district or municipal grants; and (4) fees of students.

"(1.) Government grants to the high schools and collegiate institute are mainly based on the efforts made by the locality. If the local expenditure is good, a correspondingly liberal grant may be expected from the Legislature, so far as the annual appropriation will allow. As a minimum each high school receives a fixed grant of 375 dollars, and each collegiate institute an additional grant of 275 dollars. On the condition and suitability of the premises a high school is entitled to a maximum grant of 150 dollars and a collegiate institute to one of 200 dollars. For equipment there is a maximum grant of 200 dollars and one of 600 dollars on the basis of salaries of the teachers. The remainder of the grant is distributed on the basis of average attendance. The grants in full vary from about 500 dollars to 1,800 dollars on the basis thus outlined.

"(2.) The county council is required to make a grant to each high school or collegiate institute in the county equal to the grant made by the Legislature. This grant is intended to meet the cost of instruction for county pupils; that is, for those pupils of the county who do not reside in the municipality or district where the high school is situated. It sometimes happens that the equivalent of the Government grant would not be sufficient to meet the cost of maintenance for county pupils, and in that case the county is liable for whatever additional amount is necessary to meet its share of the cost of maintenance. The principle involved in this part of the statute is that the county should pay for the education of county pupils.

"(3.) After the county and legislative grants have been received whatever further sums, in addition to any fees which have been paid, may be required to meet the cost of maintenance, must be made up by the municipality or district where the high school is situated, on the requisition of theTrustee Board. Under the provisions of the Act the municipal grant raised for this purpose is, as a matter of fact, its proportionate share of the cost or maintenance. If, for instance, there are as many county as resident pupils, the county and district pay equal shares of the cost of maintenance after deducting the legislative grant. Should there be any dispute as regards these amounts the Act provides a ready settlement by arbitration.

"(4.) County councils may require a portion of the liability of the county to be paid by the county pupils in fees not exceeding one dollar per month, the fee being uniform for all high schools in the county. Resident pupils may also be required by the board to pay fees, thus lessening the amount to be raised by the municipality. It thus follows that the question of free high schools is left to be determined by each locality, and it has been found that this option is more satisfactory than making all high school free by Act of Parliament, or fixing a uniform fee for the Province. Non-resident pupils, that is those from other counties, must pay such fees as the board deems expedient, but such fees must not be greater than the cost of maintenance or less than those of county pupils. Of the 128 high schools and collegiate institutes 48 of them are free, and the fees in the others vary from 2.50 to 26 dollars per year."

Entrance Examination.

"A uniform examination is held every year about the first of July for admission to high schools and collegiate institutes. Each high school has a board of examiners for the purpose, consisting of the principal of the high school, the public school inspector, and two qualified teachers who have no pupils at the examination, one being appointed by the public school board and the other by the separate school board of the city, town, or village where the high school is situated. The examiners are paid 1 dollar per pupil for their services, and the cost may be met by fees from the candidates or by the county and district for their respective shares. The examination papers are prepared by the high school inspectors and public and separate school

inspectors appointed by the minister of education and sent in sealed envelopes to the presiding examiner, to be opened during the hours of the examination. Only those pupils who pass the examination and whose admission has been confirmed by the high school inspectors can be admitted to a high school or collegiate institute. The examination is based on the course of the fourth form of the public schools, and includes the following subjects and values:—Reading, 50 marks; drawing, 50; neatness, 35; writing, 50; orthography, 30; literature, 100; arithmetic, 100; grammar, 100; geography, 75; composition, 100; history, 75. Optional papers are set in temperance and hygiene and agriculture, each valued at 75. The standard required to pass is one-third in each subject and one-half of the aggregate number of marks. There is also provision for recommending in case of failure the following classes of candidates:—(*a*) Those who fail to reach the standard prescribed in some subject, but who make considerably more than the aggregate marks required, and (*b*) those who in the opinion of the examiners, on account of age or for some special reason, should be recommended. The reasons should be set forth in each case. The report of the board of examiners and the answer papers (to provide for any appeals) are sent to the Education Department. The regulations also provide for the provisional admission, during the interval between examinations, of pupils who were unable to be present at the regular examination, and who would suffer if not allowed to attend a high school. Certificates are granted to all pupils whose admission has been confirmed by the high school inspectors. About 20,000 candidates annually write at the entrance examination and about half that number pass."

Statistics, 1898.

Number of collegiate institutes, 37; high schools, 93; total, 130.

Number of pupils enrolled, 23,301; percentage of average attendance, 60.

Number of teachers, 571. Average salary for principals, $1,177; for assistants, $814. The salaries of specialists in collegiate institutes range from about $1,000 to $1,500. The cost per pupil is about $34.26.

Departmental Examinations.

"The origin and development of the system of examinations conducted by the Education Department may be readily understood by considering the general aims of written examinations.

"(1.) Examinations furnish valuable aid to both teachers and students regarding the manner in which the work of the school should be taken up. They tend to give direction to the teaching, and to prevent faulty methods of instruction and a consequent waste of time and energy. It is held that a proper system of examination does much to improve the discipline of school or college, and that wherever examinations are ignored the *morale* of the institution will be found weak and the education inferior. In Ontario the aim has been, by making physical training compulsory and by emphasizing the inculcation of high moral principles, to reduce to a minimum the possible evils of examinations, and to guard carefully their educational value while

utilizing them for other purposes for which their application is indispensable.

"(2.) Examinations are serviceable as tests for the promotion of pupils. They are almost essential, but do not supply the only *data* for this purpose. In the schools of Ontario promotions are generally made by the principal, aided by the members of his staff. The principal and his assistants prepare their own questions, and hold examinations at the close of each term. The promotions are not, however, based entirely on "percentages" gained at the final examinations. The daily, weekly, or monthly class records are also taken into account, and to some extent the general estimate made by the teachers as to the pupil's industry and ability. Evidence of *power* and fitness to begin the work of a higher class is recognized as the main consideration in deciding upon the promotion of a pupil.

The pupils in either a high or public school may be promoted from time to time and reach the highest form, on the recommendation of the principal, who is responsible for the organization of his classes. No pupil is obliged to take any examinations other than those prescribed by the principal, and parents are left free to have their children write or not at the departmental or any other examinations. It is found, however, desirable and expedient in practice to modify this feature of school organization in view of the third object of examinations."

"(3.) Examinations are held for the purpose of granting certificates that have a qualifying or commercial value. These cannot be left to be awarded by the teachers or other local authorities of each school. To do so would furnish no guarantee of uniformity in standards, and without such uniformity the value of the certificates granted would be slight. The estimate of teachers may, however, receive consideration in special cases where a candidate, through sickness or other cause, clearly fails to do himself justice. Uniformity is secured by the system of departmental examinations adopted for the entire Province. It is also found convenient for teachers in high schools to utilize generally the departmental examinations for purposes of promotion, and the regulations regarding the mode by which these are conducted have, moreover, in view the direction given to the teaching, and their consequent educational effect upon all the pupils of the schools.

"In short, the aim of the system is to secure at the same time the three objects of examinations here mentioned, and to lessen, as far as possible, the evils that are said to be associated with tests of this kind. The method is practically a combination of the systems of admission to college by certificate and by examination.

"The plan adopted in Ontario has greatly reduced the number of examinations. For instance, the high school entrance examination is conveniently used by public school teachers as a test for promotion to the fifth form, and the high school primary and leaving examinations serve as promotion examinations to higher forms in the secondary schools.

"Some years ago in Ontario each of the four or five universities held its own matriculation examinations. The law society, the medical council and the divinity schools had their own entrance examinations. There were besides, examinations held for admission to normal schools and other training institutions for teachers. Dentistry, pharmacy and engineering each had its own tests for admission to a course of study for these professions. What made matters worse was that the courses prescribed were not based on a common curriculum, the examinations were held at different periods of the high school term, and pupils were under the expense, in most cases, of going from home in order to write at any one of these examinations.

"This condition of affairs, so annoying to high school teachers in the organization of their classes, has been entirely changed by having prescribed a uniform course of study for all the schools, by the adoption of a system of uniform examinations for the Province, and by the acceptance on the part of the different universities and the various learned bodies of the certificates awarded by the Education Department. The examinations are held at the same time and on the same papers in every high school and collegiate institute. The student who passes the examination may secure a certificate or certificates which will admit him as a matriculant to any university in the Province; to the school of practical science; to a course of study in law, medicine, dentistry, or pharmacy; to a course of theology in any divinity school, or to a county model school, or some other institution for the professional training of teachers.

"The examination papers are prepared by examiners qualified by experience as teachers in high schools or universities to set suitable papers. To avoid narrowness in style the examiners are selected from a wide field, and are changed from time to time. The answer papers of candidates are read by university graduates actually engaged in teaching. As a matter of fact, the papers are valued by teachers who are familiar with the same work in their own schools, and whose pupils are candidates at the same examination. The regulations make such necessary provision as prevents any identification of the papers read by any of the associate examiners.

"An important feature of the examination system in Ontario is that a student's calling in life need not necessarily be determined by the course taken up in school. If he has no special object in view but to secure a good education, no better plan is open to him for this purpose than to strive to gain a high school leaving certificate. Should he afterwards decide to enter a university, or to take up a professional course, he is in the possession of the necessary passport, without being obliged to turn again to his books and prepare for an examination.

"The course of study for Form I. in high schools is prescribed with the object of requiring all students to receive at first a good business education. The object in view is to guarantee that the interests of the great body of students will not suffer by having undue attention given to subjects required for entering

the professions. The examinations that may be held in the junior classes, or Form I., are left almost entirely to the teachers. Those students who, in addition to the requirements in other subjects, show proficiency in reading, drawing, and the commercial course, receive commercial certificates signed by the principal. A student who receives a high school commercial certificate has taken about the same course as a pupil from the elementary schools who has passed the public school leaving examination.

"Examinations are held annually in July, in the courses of study prescribed for Forms II., III. and IV. of high schools. Candidates who pass the examination for Forms I. and II. receive high school primary certificates; for Form III. high school junior leaving certificates, or university matriculation certificates; and for Form IV., senior leaving certificates, and perhaps university matriculation certificates with honours."

The School of Pedagogy.

"The highest positions in the teaching profession are open only to the graduates of the School of Pedagogy. This institution is located in Toronto, and in it are trained the first class public school teachers, the assistants and principals of high schools and collegiate institutes, and the public school inspectors. Its importance may be seen from the additional fact that only first class teachers are eligible to be appointed principals of county model schools or members of county boards of examiners. The associate examiners for the departmental examinations must be university graduates actually engaged in teaching, and this provision practically leaves the work of reading the papers in the hands of persons who have passed through the School of Pedagogy.

"The graduates of the School of Pedagogy are in fact the teachers of the teachers of the public schools. As high school teachers they educate the students of the secondary schools, and as principals of model schools they give the professional training required at first of every public school teacher. At the departmental examinations they may be said to guard the avenues for admission to the universities and to the professions, and at county board examinations they are the judges of the qualifications of those who become third class teachers. In fact their influence as inspectors and teachers is so far-reaching as to extend, it may be said, to the entire half million children attending the schools of the Province.

"To be admitted to the School of Pedagogy it is necessary for a student to have at least a high school senior leaving certificate. A large number of its students are, however, B.A.'s of the various universities of the Province, many of them being graduates of high honour standing. Teachers who hold second class certificates from one of the normal schools, and have taught two years, are exempted from attendance, but must, like others, hold senior leaving certificates and pass the final examination. When they pass this examination they receive first class public school teachers' certificates, which also qualify them to teach as assistants in high schools. Third class teachers, who have taught three years and hold senior leaving certificates, by attending the

School of Pedagogy and passing the examination, are entitled likewise to first class public school teachers' certificates. The other certificates granted qualify only to teach in high schools or collegiate institutes, but first class certificates answer for both purposes.

"As in the case of the normal schools the course of study is almost entirely professional. Besides observation of the teaching done in the provincial model schools, including the kindergartens, an important part of the course consists of model lessons given by the lecturers and practice lessons by the students themselves who are formed into classes for the purpose. It is held that much valuable training can be given, and many requisites of a good teacher tested, before he is allowed to take charge of a class, even as an assistant. The ability to show the logical arrangement of a subject to be taught, to recognise the salient points to be brought out in a presentation lesson, to show, as a teacher accuracy of language and grasp of the matter to be taken up before a class—these and kindred characteristics of a good teacher should, and may, be acquired before any chance is given to experiment on a class of high school pupils. Those who desire to become specialists in collegiate institutes must first pass the non-professional examinations required at the university. For them an additional course of training is provided in methods and a higher standard is exacted at the professional examination.

"When a teacher-in-training shows that he possesses good teaching ability he may complete the course in half a year, but in many instances a year's work is found necessary. He then passes the examination of the School of Pedagogy and enters upon the practical part of his training. The "Interim Certificate' which he receives qualifies him to teach for six months in any high school or collegiate institute. He is thrown, as any regular assistant, upon his own resources, and he receives the advice and support of an experienced principal, who, as a rule, if teaching ability is exhibited, desires to retain him as a permanent member of his staff. At the close of the half year those who have been thus serving their "apprenticeship" are required to pass a practical examination in teaching, conducted by the high school inspectors or other persons appointed by the Minister. If successful they receive permanent certificates, but if they have proved themselves failures in the work, they are no longer allowed to remain in the profession.

The holder of an assistant's certificate, if a graduate in arts of a British or Canadian university, who has taught successfully two years in a high school, is entitled to a principal's certificate, and if before or after this he qualifies by examination as a specialist, he has gained the highest certificate awarded by the Department.

"About 100 students attend the School of Pedagogy each session."

Inspectors of High Schools.

"The inspectors of high schools are appointed by the Government, and are selected from principals of collegiate institutes, who have attained the front rank in their profession. The

important functions of the secondary schools and the regulations under which they are conducted render their inspection a matter which largely affects elementary as well as higher education . . . It has been fully acknowledged by educationists that work of this kind to be properly performed must be assigned to experts practically engaged as teachers in high school or university. The high school inspectors, like the public school inspectors, are also largely relieved from the responsibility of licensing teachers. They have, however, and properly so, a voice like public school instructors, in preventing incompetent persons from entering the profession.

"The high school inspectors have thus been enabled to devote their energies to the proper work of supervision, and acting under regulations of the Education Department, their official visits have tended much to improve the character of the schools. Their reports to trustees have in a few years brought about great improvements in the accommodations, large additions to the libraries and apparatus, and superior appliances for physical training. More satisfactory still has been the advance made in the qualifications of the teaching staffs . . ."

III. University Education.

The Provincial University.

History of the University of Toronto (from the University of Toronto Calendar for 1896–97).—The movement which ended in the establishment of the University of Toronto as the centre of the educational system of the Province of Ontario originated with General Simcoe, the First Governor of Upper Canada, who repeatedly expressed his conviction, both before his departure from England and also during his term of office (1792–1796), that the best interests alike of the Government and of the inhabitants demanded the establishment of a University in Upper Canada. It was not, however, during his administration that the project assumed a definite form.

In 1797 the Legislative Council and House of Assembly in a joint address to King George III. asked "that his Majesty would be graciously pleased to direct his Government in the Province to appropriate a certain portion of the waste lands of the Crown as a fund for the establishment and support of a respectable Grammar School, in each district thereof; and also a College or University for the instruction of youth in the different branches of liberal knowledge." To this address a favourable answer was transmitted, and the acting Lieutenant-Governor, the Hon. Peter Russell, was directed to determine the manner and character of the appropriation. In accordance with this request the Executive Council of Upper Canada reported on the 1st December, 1798, that an appropriation of 500,000 acres would be sufficient for the support and maintenance of four Grammar Schools and a University. For the foundation of the latter nothing was done until 1827, when a Royal Charter was granted for the establishment at or near York, as Toronto was then called, of a college "with the style and privilege of a University," to be called "King's College," having for its endowment that

portion of the grant of "waste lands" originally provided for the University in the report above referred to. These lands were in 1828 exchanged for 225,944 acres of Crown Reserves. . . . . The opening of the College was delayed for fourteen years. In consequence of public representations on the sectarian character of the College, all religious tests were abolished by an amended charter which passed the two Houses of the Provincial Legislature and received the Royal Assent in 1837. In 1842 the affairs of the University had assumed such a condition as to render its organisation possible, and Faculties of Arts, Medicine, Law and Divinity were established. In that year the erection of the College Building was begun. In 1843 the first matriculation of students took place, and inaugural addresses and lectures were delivered on the 8th and 9th June of that year.

The agitation which resulted in the amended charter of 1837 had continued after the opening of the College in 1842, owing to efforts made to defeat the purpose of the amendment, and in 1849 an Act of the Legislature effected important modifications in the constitution of King's College whereby all instruction in Divinity was discontinued, and a larger measure of public control of the affairs of the University instituted, through the formation of a Senate, of which a number of the members were appointed by the Crown. The name was now changed from that of the University of King's College to that of "The University of Toronto."

Three years afterwards the University underwent a further transformation, by which the Act of 1853 abolished its Faculties of Medicine and Law, and divided its functions between the two newly organised corporations of the "University of Toronto" and "University College." To the Senate were assigned the duties of framing the curriculum, holding examinations and admitting to degrees in Arts, Law and Medicine, while to the President and Professors of University College, as a distinct and independent corporation with special powers, were assigned the teaching in Arts and the entire discipline and control of students. The models followed in the reorganisation of the Universities, it was claimed, were the University of London and University College, London, both of which had then been only recently established. For thirty-four years the University of Toronto and University College performed the functions respectively assigned to them by this Act . . . and for thirty-four years the constitution of the two corporations above mentioned remained unchanged. Other collegiate bodies, principally denominational schools of theology, entered into affiliation with the University, and, with regard to their especial requirements, the course of study in Oriental Languages was augmented; but the Faculty of University College continued to do the work of instruction for nearly all the students in Arts who presented themselves for examination. The candidates for examinations and degrees in Medicine were trained in medical schools in affiliation with the University, and in the Faculty of Law the examinations were based upon text-books prescribed by the Senate, without teaching.

In 1887 both the University of Toronto and University College were remodelled by the University Federation Act. The main object of renewed legislation was to secure a more uniform standard of higher education by the union of the various denominational universities of Ontario with the Provincial University. Since the proclamation of the Act, Victoria University at Cobourg, representing the Methodist body, has entered into federation with the University of Toronto. The governing body of this institution is now represented on the Senate of the University of Toronto, its graduates elect representatives to the same body, and by the removal of the faculty and students of Victoria University to Toronto, the Union of the two Universities has been effected. Under the Federation Act, the theological colleges also, formerly in affiliation with the University of Toronto, have become federated colleges, and enjoy increased representation on the Senate.

"The faculty of University College, by the Act of 1887, consists of professors and lecturers in Classical Languages and Literature (including lecturers in Ancient History), Oriental Languages, English, French, German, and Moral Philosophy. All other portions of the Arts course are assigned to the Faculty of the University of Toronto, of which the lectures are made equally available to the students of University College, and those of all federating universities and colleges. . . . . A Faculty of Medicine in the University of Toronto was established immediately upon the passing of the Act in 1887, and teaching is imparted in all branches of medical science. All the advantages of the Faculty of Arts are available for the students in Medicine, and the laboratories of the scientific departments are utilised equally by students in both faculties.

In 1888 a stimulus was given to the study of scientific methods of farming by the affiliation of the Ontario Agricultural College, and the adoption of a curriculum of study for the degree of Bachelor of the Science of Agriculture. Similarly an examination for the degree of Doctor of Dental Surgery was instituted, as a consequence of the affiliation of the Royal College of Dental Surgeons of Ontario. The College of Pharmacy was subsequently admitted to affiliation, and with the extension of the same privileges to the Toronto College of Music, a curriculum of study was prepared for the degree of Bachelor of Music. The School of Practical Science was affiliated in 1889, and graduates of the School are specially eligible on certain conditions for the degrees of Bachelor of Applied Science and of various degrees in Engineering in the University. By a recent enactment of the Senate a curriculum was prescribed leading to the degree of Bachelor and Doctor of Pedagogy.

Thus,* "the highest institution of learning in Ontario controlled by provincial authority is the University of Toronto. It is the

* Millar: Educational System of the Province of Ontario.

copestone of the educational structure . . . It is cheerfully sustained by Protestant and Roman Catholic, and it has a large body of devoted graduates representing all the leading religious denominations. . . . It is a conservative force guarding the educational citadel from ill-advised innovations, and at the same time an agent of progress and enlightenment . . ."

"The entire system of education in Ontario has been established with the object of making good citizens. It is assumed that the state is benefited by having its educational facilities brought as nearly as possible within the reach of all. With all our public schools free, and our high schools either free or available by the payment of comparatively low fees, the University of Toronto also opens its doors on easy terms to all students who pass the matriculation examinations . . . Accepting the honest convictions of those favourable as well as of those adverse to denominational oversight in the training of youth, the University Federation Act has presented a solution of a problem at one time embarrassing to statesmen and dangerous to the progress of higher education."

"For many years the University experienced repeated changes in its local habitation as well as in the scope of its functions. The stately pile which forms the centre of the cluster of collegiate buildings devoted to the work of the University was partly destroyed by fire some years ago, but it has since been reconstructed with many internal improvements. Considerable extension has been effected in the numbers, capacity, and adequate equipment of the lecture rooms and laboratories. Much attention has also been given to improvements in heating, lighting, and ventilation.

"The new school of biology, which harmonises in structure with the University, is one of the handsomest and most substantial buildings on the Continent devoted to that department of science. Its corridors, lecture rooms, and laboratories are of a very spacious character. The central portion is assigned to the University Biological Museum. This contains, in addition to other collections, an extensive and valuable series of preparations used for illustrating the lectures in animal and vegetable morphology and embryology.

"To the south and east of the University stands the School of Practical Science, a large four-story building, where students have extensive facilities for gaining proficiency in the different departments of applied science. The accommodation has in view extensive courses in chemistry, mineralogy, assaying and engineering.

"A new building for chemistry was provided in 1893 to the west of the School of Practical Science. This building is in the form of a quadrangle, with the lecture-rooms on one side and the laboratories on the other. There is laboratory accommodation for 200 students, and the lecture-rooms hold about 350. . . . Between the School of Biology and the University has recently been completed the new library, on plans embracing the most recent improvements derived from the experience of leading universities in Germany and the United States. It contains a

fire-proof room to accommodate 120,000 volumes, a reading-room to accommodate 200 students, and seminary rooms for various departments of instruction.

"The large number of ladies who have of late years taken up the B.A. course gave rise to a project for the erection of a residence for women attending the University. A suitable site has been offered for the purpose by the University authorities and a number of the citizens of Toronto have taken considerable interest in the object."

Organization.

"By legislative enactment the Provincial University consists of the University and University College, which have their respective functions. Various bodies are entrusted with the management of these institutions.

1. *The Crown.*—The supreme authority in all matters continues to be the Crown, from whom emanated the charter that erected the University. All appointments, therefore, rest with the Lieutenant-Governor, and all statutes of the Senate to be binding must receive his approval. All property is vested in the Crown and is managed and administered by an officer appointed by the Government.

2. *The Board of Trustees.*—This body is entrusted with general powers as to the management of the endowment, and consists of ten members, viz., the Chancellor, the Vice-Chancellor, the President of University College, five members elected by, but not necessarily members of, the Senate of the University, and two members elected by, but not necessarily members of, the Council of University College.

3. *The Senate.*—This body consists of (*a*) *ex-officio* members, (*b*) appointed members, and (*c*) elected members, making 61 in all. The function of the Senate is the general administration of the University. It has to do with the appointment of examiners, the prescribing of courses of study, the fixing of standards for examination, the granting of degrees, and may be said to give general direction as regards the policy to be pursued in University matters. The Chancellor is elected by the graduates and the Vice-Chancellor is chosen from actual members of the Senate at its first meeting after a triennial election.

4. *Convocation.*—Convocation consists of the whole body of graduates of the University in all its faculties. It elects the Chancellor, and, in divisions according to faculty, it elects members of the Senate as its representatives in arts, law, and medicine. The result of its discussions is not binding on the Senate, but may be communicated to that body for action to be taken thereon.

5. *The University Council.*—This body is composed of a president, who shall also be president of the University College, and the professors in the University. It has full authority and responsibility of discipline over all students in relation to professors and other teachers. It has also entire authority respecting the societies and associations of the students. All

officers and servants of the University are also subject to its authority, and on its report the laboratory fees to be paid by students are determined by the Lieutenant-Governor in Council.

6. *The Council of University College.*—Like the University Council, this body has control over students of University College and authority over its servants. It consists of the president and professors of the college, together with the dean of residence. It has larger duties and powers, however, than the University Council, being constituted a corporation."

Faculties—The Arts Course.

"The University possesses teaching faculties in law and medicine as well as in arts. It was felt that the advantages of a well-equipped faculty for the course in arts might readily be made available for the students of medicine and thus elevate the standard of medical education. A similar opportunity gave rise to the establishment of a faculty of law. To furnish instruction for students in arts has always, however, been held to be the main object of the Provincial University. Its endowment has been regarded as primarily intended for the advancement of higher education, and its resources have been guarded in the interests of of those taking the B.A. course. The close relations which exist between the University and the secondary schools of Ontario have given to the former a national position . . . This connection is now felt by the University to be far more valuable than a large addition to its endowment . . . The curriculum has been arranged with due regard for the aims of those who desire simply a liberal education as well as of those intending to enter some profession. It has provided such a course of literature, mathematics, science, and philosophy as serves the purposes of all students who desire a high academic training, and, by its provisions for affiliation and federation, facilities are secured in the interests of the various religious denominations and of the learned professions.

"The division of the arts course into what are termed university and college subjects respectively, marks an important development of university organization. To the university professoriate are assigned the departments of Mathematics, Physics, Chemistry, Biology, Physiology, Mineralogy and Geology, History and Ethnology, Italian, Spanish, Comparative Philology, Political Economy, Constitutional History, Logic, and Mental Philosophy. In University College are taken up Greek, Latin, Ancient History, English, French, German, Oriental Languages, and Ethics. This arrangement has the advantage of relieving the colleges of the expense necessary for providing the costly laboratories required in the teaching of modern science, and at the same time affording better facilities for closer intercourse between teacher and students in departments where smaller classes are desirable. The division thus made has also introduced a principle which gives every facility for the union or federation of different colleges with the Provincial University."

University Federation.

"The main object of the University Federation Act of 1887 was to secure a uniform standard of higher education by the union of the various denominational universities of Ontario with the

Provincial University. It was contended that a high standard can best be maintained when there are uniform examinations for graduation as well as for matriculation; that modern requirements—especially in the departments of science—call for extensive equipments which can be better provided by a union of resources; that the mingling of students of various sects tends to cultivate broader Christian sentiments and more patriotic views of citizenship; and that members of churches need not be taxed to maintain half a dozen universities to do work already provided by the State.

"It was moreover felt that all the advantages claimed for denominational oversight might be retained in connection with the plan of university federation. A college federated with the University of Toronto carries on the same work as University College; and its students have the same privileges secured to them as the students of the latter institution by the establishment of the university professoriate. For instance, the undergraduates, who one hour of the day receive instruction in Latin or Moral Philosophy in different colleges meet together another hour of the day to receive lectures from university professors in Mathematics, Civil Polity, Chemistry or Biology. A university federating with the Provincial University ceases to exercise its degree-conferring powers except in Divinity. Its students take the same university examinations in the different years as the students of University College, and the degrees conferred give them the status of *alumni* of the Provincial University. The governing authorities of a federated college are represented on the Senate of the University of Toronto, and its graduates elect representatives to the same body. Under the Federation Act the theological colleges also, formerly in affiliation with the University of Toronto, have become federating colleges and enjoy increased representation on the Senate. The following institutions are now federated to or affiliated with the Provincial University:—

Victoria University (Methodist).
Knox College (Presbyterian).
St. Michael's College (Roman Catholic).
Wycliffe College (Episcopalian).
Huron College (Episcopalian).
The School of Practical Science.
The Ontario Agricultural College
Trinity Medical School.
Royal College of Dental Surgeons.
Ontario College of Pharmacy.
Women's Medical College.
Toronto College of Music."

There are, however, other corporations with the power of granting degrees which are not affiliated to the University of Toronto. These institutions are more or less closely connected with various religious denominational bodies—thus Trinity College, Toronto, is connected with the Episcopal Church;

Queen's College with the Presbyterian community. The McMaster University is supported by the Baptists, while the Roman Catholic University is the University of Ottawa.

"The University of Ottawa* has no regular endowment. It is conducted by members of a religious order, the Oblates of Mary Immaculate. Some fifty members of this religious order are engaged in educational work here without salary. They receive from the University in return for their services, board, clothing, a small allowance for vacation annually, and an assurance of ample assistance in sickness and old age."

IV. Technical Education.

The School of Practical Science.

"The School of Practical Science was founded by Act of the Legislative Assembly in 1877. An arrangement was entered into with the Council of University College, whereby the students of the school received instruction in those university subjects which were included in the work of the school. In 1889 the school was affiliated to the University of Toronto. In 1890 very large additions were made to the original building. The latter was set apart for the work in chemistry, mineralogy, and assaying, while the engineering and architectural departments were accommodated in the new building, a large portion of which is occupied by the engineering laboratory. This laboratory has been equipped with the most modern machinery and apparatus for carrying on original investigations in steam engineering, hydraulic and electrical engineering, strength of materials of construction, standards of length, etc. The cost in fees for a full course is 120 dollars.

"The department of chemistry is provided with laboratories for qualitative and quantitative analysis, toxicology, etc. In the department of mining engineering there are laboratories for assaying, blowpipe analysis, microscopic lithology, etc. For instruction in surveying and practical astronomy the school is supplied with a good collection of the ordinary field instruments—transit levels, etc.—and also with a ten-inch theodolite for astronomical and geodetic work.

"The departments of instructions are:—

1. Civil engineering, including sanitary engineering.
2. Mechanical and electrical engineering.
3. Mining engineering.
4. Architecture.
5. Analytical and applied chemistry.

"The instruction given in each of these departments is designed to give the students a thorough knowledge of the scientific principles underlying the practice in the several professions, and also to give him such a training as will make him immediately useful when he enters into active professional work."

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* See Papers relating to University Education of Roman Catholics in certain Colonies. (Colonial Office Return, London, 1900. Cd. 115.)

"The institution known as the "Ontario Agricultural College and Experimental Farm" is situated about a mile to the south of the city of Guelph, in the centre of an extensive agricultural and noted stock-raising district, readily accessible by rail from all parts of the province. The farm consists of 550 acres, about 400 of which are cleared. It is composed of almost every variety of soil, and hence is well suited for the purpose for which it was selected. Ontario Agricultural College.

"The instruction given at the institution is embraced under two heads, a course of study and a course of apprenticeship. The latter is intended for special students who come in for practical farming for the autumn, winter, and spring terms, during which they are employed in the station in each of the six departments of practical farm labour. The course of study is for two years, at the end of which time a diploma is granted. Holders of a diploma who have attained a certain standard in the theoretical and practical work of the first two years, may remain for a third. In 1888 the college was affiliated with the University of Toronto, and an examination for the degree of Bachelor of the Science of Agriculture was instituted, to which only students of the third year in the Ontario Agricultural College may be admitted."

"The design of the Government of Ontario has been to provide a general education for all classes, and such a training as will enable any student who so desires to take a professional course. With the exception of the fees required, the academic training is provided at the public expense, but it is not the policy of the Province to provide free for students a professional education. Perhaps the only exceptions to this principle are to be found in the case of the Agricultural College and the School of Practical Science. As the interests of the farmers are largely bound up with those of the Province generally, the subject of agriculture has due recognition in the public school curriculum, and liberal grants from the Legislature have been made to farmers' institutes. The expenditure annually made in behalf of the Agricultural College at Guelph is justified by the growing importance of a knowledge of scientific agriculture to the farming community, and by the high position gained by the institution among colleges with a similar object. Encouragement is also generously given in the public and high schools, as well as in the mechanics' institutes, to drawing as a preliminary training for various industrial pursuits, and the erection and equipment of the School of Practical Science has been demanded in view of the immense mineral resources of the Province, which are only now beginning to be fully valued. Professional Schools.

"In the case of other professions, such as law, medicine, dentistry, etc., the intention has been to require those who take up those pursuits to gain, at their own expense, the knowledge or training necessary. These professions have, however, been placed by law on such a basis as to guarantee to the public that those who follow such callings shall be persons of good education and high professional acquirements. The statutes give largely to the members of each profession the power to make regula-

tions regarding the examinations to be passed by those desiring to enter such profession.

"The Law Society, which has its permanent seat at Osgoode Hall, Toronto, makes regulations for admission to the profession of law. In order to enter upon the course a student must pass the matriculation examination for admission to the arts faculty of a university, and must then take a five years' course and pass the examinations, which cover an extensive field of professional reading. Many students previously take the B.A. or LL.B. degree in a university, and thereby shorten the course to one of three years. There has been established by this society a law school, which students must attend for a portion of the time.

"The College of Physicians and Surgeons for Ontario prescribes the course of study and conducts the examination for all students who enter the medical profession. To begin the study a student must pass the matriculation examination (with the addition of science) as conducted by the Education Department. As in the case of law, five years are necessary to complete the course. There are six medical colleges in the Province, including the medical department of the Provincial University, but a degree from any university or college will not relieve a candidate from passing the examinations prescribed by the College of Physicians and Surgeons of Ontario.

"The College of Dentistry, Toronto, which is affiliated with the Provincial University, controls the entrance to that profession, and the College of Pharmacy, also affiliated with the Toronto University, prescribes the course of study and conducts the examinations for those who desire to become druggists.

"Powers somewhat similar in character are held by surveyors and civil engineers. The Ontario Veterinary College, Toronto, has acquired a more than provincial reputation by the thorough training it gives to those who intend to practise the veterinary art. A number of commercial colleges have been established in the principal cities of the Province, where good facilities are offered to those desiring a business education. The increased attention now required to be given in the high schools and collegiate institutes to the different departments of a business education has no doubt enabled these institutions to give a good commercial training without requiring students to be at the expense of attending a commercial college. The incorporation of the "Stenographic Reporters' Association" is expected, by the powers and privileges conferred, to give valuable aid towards the study and practice of a profession growing in value. Music, both vocal and instrumental, has attained a high position in Ontario through the efficiency of the College of Music (affiliated with Toronto University), the Conservatory of Music, and the various ladies' colleges. These latter institutions, as well as the different art schools, have contributed much towards the progress of the fine arts, and the character of the exhibits made at the Art School Examinations of the Education Department has for years been most commendable."

V. Special Schools.

Institute for the Deaf and Dumb.

"The Legislature of Ontario has made ample provision to meet the educational requirements of the deaf mutes of the Province. The institution for the deaf and dumb, situated at the city of Belleville, is open to all deaf mutes from seven to twenty-one years of age who are residents of Ontario, and who are not deficient in intellect and are free from contagious diseases.

"The object in founding and maintaining this institute is to afford educational advantages to those who are, on account of deafness, either partial or total, unable to receive instruction in public schools. The period of instruction is seven years, with a vacation of nearly three months during the summer of each year. Parents or guardians who are able to pay are charged the sum of 50 dollars a year for board. There are no charges for tuition, books or medical attendance. Clothing must be furnished by parents or friends.

"The course of instruction is both scholastic and industrial. In the former the work is analogous, so far as the capacity of the pupils will allow, to that of the elementary schools. The modes of instruction employed are the manual alphabet, signs, writing, and articulation or visible speech.

"In the industrial department, the trades of printing, carpentering, and shoe-making are taught to boys, and girls are instructed in general domestic work, tailoring, dressmaking, sewing, knitting, the use of the sewing machine, and such ornamental and fancy work as may be desirable.

"Since the institution was opened in 1870, no fewer than 908 children have received the benefits of the instruction given. Most of those who have attended have turned out well, and have become an intelligent, law-abiding class. . . . . In the organisation and management of the institute, advantage has been taken of the most improved methods of instruction recognised in America and in Europe for training the deaf and dumb."

Institution for the Blind.

"The institution for the education of the blind was established in the city of Brantford in 1872. Like the institution for the deaf and dumb, it is intended to be supplementary to the public school system of the Province. Youths between the ages of seven and twenty-one are admitted who are not disqualified by disease or mental capacity, but whose sight is so defective or impaired as to prevent them from receiving education by the ordinary methods. No charges are made for tuition in the case of pupils admitted from Ontario. . . . .

"Pupils are taught arithmetic, grammar, geography, reading, writing, and at a more advanced stage, English literature and history. Reading is taught by the use of embossed type traced by the fingers, and writing with the aid of a grooved card, which acts as a guide to the hand. The ordinary expedients in the

case of blind pupils are employed to give information in geography and natural history. Where the ability of the pupils justifies, very valuable instruction is given in vocal and instrumental music. Many graduates of the institution have shown marked proficiency with the pianoforte, organ, or violin. . . . . A kindergarten class is now an important department of the institution. . . . . Considerable attention is given to industrial training. . . . . In a few sessions an intelligent youth may graduate as a competent workman and become able to earn a living for himself. Girls are instructed in sewing and knitting, including the use of sewing and knitting machines, and have in this way been trained to provide for themselves a comfortable living.

"Attention is paid to physical training by instruction in gymnastic and calisthenic exercises. The health of the pupils is carefully looked after, and satisfactory provision is made for religious instruction by devotional exercises morning and evening, and by attendance at the churches of their respective denominations every Sunday. The pupils have access to a good library of embossed books which are increased in numbers from year to year."

VI. Industrial Schools.

"According to the provisions of 'The Industrial Schools Act' of Ontario, Boards of Trustees in any city or town may establish schools in which industrial training is provided, and in which children are lodged, clothed, and fed, as well as taught. A Board of Trustees may delegate these powers, rights, and privileges to a benevolent or philanthropic society, but in such a case the chairman and secretary of the board and the school inspector become members of the board of management.

"The trustees provide the teachers necessary for the industrial school, and the general superintendent of the school must, when practicable, be selected from the teachers so appointed. Any person may bring before the police magistrate, or before some other competent authority, any child apparently under the age of fourteen years who comes within the following descriptions:—

1. Who is found begging or receiving alms, or being in any street or public place for the purpose of begging or receiving alms;

2. Who is found wandering, and not having any home or settled place of abode or proper guardianship or not having any lawful occupation or business or visible means of subsistence;

3. Who is found destitute, either being an orphan or having a surviving parent who is undergoing penal servitude or imprisonment;

4. Whose parent, step-parent or guardian represents to the judge or magistrate that he is unable to control the child, and that he desires the child to be sent to an industrial school under this Act;

5. Who by reason of the neglect, drunkenness, or other vices of the parents, is suffered to be growing up without salutary parental control and education, or in circumstances exposing him to lead an idle and dissolute life;

6. Who has been found guilty of petty crime, and who, in the opinion of the judge or magistrate before whom he has been convicted, should be sent to an industrial school instead of a gaol or reformatory.

"The judge or magistrate, if satisfied on enquiry that it is expedient to deal with the child under the Act, may order him to be sent to a certified industrial school for a period not extending beyond the time when the child will attain the age of sixteen years. The trustee board or society may admit into its industrial school all children apparently under the age of fourteen years who are committed by judge or magistrate; and it has power to place such children at such employments and cause them to be instructed in such branches of useful knowledge as are suited to their years and capacity.

"The Act provides for having, as far as practicable, Roman Catholic children sent to Roman Catholic industrial schools, and other children to other industrial schools. A minister of the religious persuasion to which the child appears to belong may visit the child at the schools on such days and at such times as may be fixed by the regulations of the Education Department.

"The Minister of Education may at any time order any child to be discharged under certain conditions from an industrial school.

"The school corporation or society may make rules for the management and discipline of the industrial school, but such rules must be consistent with the Act, and must be approved by the Education Department before being enforced.

"In case a child sent to an industrial school has not resided in the city or town in which the said school is situated, or to which it is attached, for a period of one year, but has resided for that period in some other county, city, or town, the school board or society may recover from the corporation of such county, city, or town the expense of maintaining the child.

"An Industrial School was established a few years ago at Mimico, a short distance from Toronto. The total expenditure was about 100,000 dollars, which was partly raised by subscription and partly met by the Legislature and city corporation. The buildings consist of one large and three smaller "cottages," besides workshops, and a large new building will soon be ready for occupation. There is a farm of fifty acres attached, and by working upon this as well as in the workshops, the boys are trained to industrious habits. About 200 children are in attendance. The cost is about 2 dollars a week for each, and the Legislature make a grant of 3,500 dollars to the institution."

PART II.—THE SYSTEM IN 1899; EXTRACTS FROM THE REPORT OF THE MINISTER OF EDUCATION FOR THE YEAR 1899.

I.—Public School Teachers and their Certificates.

a. Number of Public School Teachers' Certificates, 1899.

	Male.	Female.	Total.
Third Class, per County Model School Reports - - - - - - -	432	726	1,158
Second Class—			
From Ottawa Normal School -	56	160	216
Toronto Normal School -	36	226	262
First Class—			
From Ontario Normal College -	43	20	63

b. Remarks on the Supply of Qualified Teachers.

It is to be hoped that the establishment of a third Normal School will be followed by the appointment of a larger number of second-class teachers in our Public Schools than heretofore. It is unfortunate that Boards of Trustees do not yet fully realise the advantage of having in our schools teachers of high qualifications. Too often there is a disposition in some places to secure the so-called cheap teacher, regardless of the important interests involved. Teachers of character and ability cannot be expected to remain in the profession unless their services are better remunerated. Young men and young women of energy cannot be blamed should they withdraw from a profession in which they find high scholarship and valuable experience are not properly appreciated. It may be doubted if a higher standard is exacted in other countries for teachers' certificates. In Ontario the standard has been very much advanced from what it was a dozen years ago. With the abolition of the Primary examination, a student who desires to become a teacher will ordinarily attend a High School three years, and with a year's professional training subsequently exacted, it will be readily conceded that the expense involved in entering the profession is considerable.

c. Teachers in training at Various Classes of Normal Schools, 1877–1899.

(Taken from the Report for 1899.)

Year.	County Model Schools.			Normal College.			Normal and Model Schools, etc.					
	No. of schools.	No. of teachers-in-training.	No. that passed final examination.	No. of teachers.	No of students.	Receipts from fees of Normal College.	No. of Normal School teachers.	No. of Normal School students.	No. of Model Schools and Kindergarten teachers.	No. of Model Schools and Kindergarten pupils.	Receipts from fees of Normal Schools, Model Schools, and Kindergarten pupils.	Expenditure, Normal and Model Schools.
						$ c.					$ c.	$ c.
1877	50	1,146	1,124	—	—	—	13	257	8	643	7,909 22	25,780 88
1882	46	882	837	—	—	—	16	260	15	799	13,783 50	44,888 02
1887	55	1,491	1,376	—	—	—	13	441	18	763	16,427 00	40,188 66
1892	59	1,283	1,225	10	96	1,630 00	12	428	22	842	19,016 00	45,724 12
1897	60	1,645	1,384	12	180	4,374 00	13	447	23	832	18,797 59	46,390 91
1898	60	1,288	1,166	12	176	2,600 00	10	458	24	858	20,587 41	46,949 63
1899	61	1,271	1,158	12	148	1,845 00	10	478	25	863	19,903 00	46,835 03

d. Teachers' Institutes, 1877–1898.

(Taken from the Report for 1899.)

Year.	Receipts.							Expenditure.	
	No. of Teachers' Institutes.	No. of members.	Total No. of teachers in province.	Amount received from Government grants.	Amount received from municipal grants.	Amount received from members' fees.	Total amount received.	Amount paid for libraries.	Total amount paid.
				$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1877	42	1,181	6,468	1,412 50	100 00	299 75	2,769 44	—	1,127 63
1882	62	4,395	6,857	2,900 00	300 00	1,088 84	9,394 28	453 02	5,365 33
1887	66	6,781	7,594	1,800 00	1,879 45	730 66	10 405 95	1,234 08	4 975 50
1892	69	8,142	8,480	1,950 00	2,105 00	875 76	12,043 54	1,472 41	6,127 46
1897	73	7,627	9,128	2,425 00	2,017 45	901 15	12,446 20	1,479 88	6,598 84
1898	75	8,238	9,209	2,659 00	1,857 50	876 25	12,629 49	1,526 34	6 730 60

e. Temporary and Extended Certificates issued during 1899.

Counties.	Temporary Certificates authorised by the Minister of Education during the Year.	Third Class Certificates extended by the Minister of Education during the Year.
Essex	10	6
Frontenac	4	—
Kent	—	1
Lanark	1	1
Leeds	—	1
Norfolk	2	—
Ontario	—	2
Oxford	—	1
Peel	1	—
Prescott and Russell	1	—
Prince Edward	—	1
Renfrew	3	4
Stormont	—	2
Welland	—	1
District of Parry Sound and Nipissing	11	2
Eastern Ontario, R.C.S.S.	20	4
Western Ontario, R.C.S.S.	5	—
Total, 1899	58	26
Total, 1898	47	22
Increase	9	4

The periods of service were: three years and under, 6; seven years and over, 20.

f. Specialists' Certificates

Among the "Revised Regulations" adopted in 1896 appears the following:—Any person who obtains an Honour Degree in the department of English and History, Modern Languages and History, Classics, Mathematics, or Science as specified in the calendars of any University of Ontario, and accepted by the Education Department, is entitled to the *non-professional qualification of a specialist* in such department. A graduate who has not taken an Honour Degree in one of the above courses is entitled to the non-professional standing of a specialist on submitting to the Education Department a certificate from the Registrar of the University that he has passed, subsequent to graduation, the examinations prescribed for each year of the Honour course of the department for which he seeks to be recognised as a specialist, and which he has not already passed in his undergraduate's course; or any examination which is recommended by the University as equivalent thereto, and accepted as such by the Education Department.

Professional qualifications.—Every candidate for the professional examinations must hold the necessary non-professional

standing before writing at the examinations at the Normal College for a specialist's certificate. The holder of an Assistant High School Teacher's Certificate who has the necessary non-professional standing is not required to attend the Normal College, but may write at the examination for specialist on the paper in "Methods" only. This paper may be taken at Hamilton or at any other place in the Province if the candidate makes arrangements with the Public School Inspector to preside. The department must be informed of such arrangements at least one month before the examination.

Commercial Specialists.

Any person who passes an examination in the subjects set forth in the course for Commercial Specialists (each subject to be valued at 100), and who is the holder of a High School Assistant's Certificate, obtained either before or after passing such examination, shall be entitled to a Commercial Specialist's Certificate.

The course for Commercial Specialists is as follows:—

Book-keeping.—Single and double entry book-keeping; wholesale and retail merchandising, commission business, manufacturing; warehousing, steamboating, exchange, joint stock companies, municipalities, societies and public institutions, statements and balance-sheets, partnership adjustments, liquidation and administration of estates, auditing, filing papers, and the use of special columns and the various other expedients in book-keeping to save time and labour and secure accuracy of work.

Penmanship.—Theory and practice of penmanship, Spencerian and vertical; ledger headings; marking and engrossing.

Commercial Arithmetic.—Interest, discount, annuities certain, sinking funds, formation of interest and annuity tables, application of logarithms, stock and investments, partnership settlements partial payments, equation of payments and exchange.

Banking.—Money and its substitutes; exchange; incorporation and organisation; banks; business of banks, their relation to each other and to the business community; the clearing house system; legal requirements as to capital, shares, reserves, dividends, note issue; insolvency and consequent liability.

Business Forms.—Invoices, accounts, statements, due bills, orders, receipts, wages, house receipts, deposit receipts, deposit slips, bank pass books, promissory notes, bills of exchange, bank drafts, cheques, bonds, debentures, coupons, instalment scripts, stock certificates, stock transfers, proxies, letters of credit, affidavits, balance sheets, pay sheets, time sheets and special forms of general book-keeping, books to suit special cases.

Law of Business.—Contracts, statute of limitations; negotiable paper and endorsements; sales of personal property; accounts, invoices, statements, etc.; chattel mortgages; real estate and mortgages; interest; agency; partnership; corporations; guarantee and suretyship; receipts and releases; insurances; master and servant; landlord and tenant; bailment; shipping and trans-

portation; host and guest; telegraphs; auctions; patents; copyrights; trade marks and industrial designs; affidavits and declarations; subjects and aliens; wills, and joint stock companies.

Stenography.—The principles of Stenography; writing from dictation at a speed of sixty words per minute, and accurate transcription into longhand at a speed of twelve words per minute; the dictated matter to comprise business correspondence or legal documents.

Drawing.—Object and Model Drawing; Perspective and Geometrical Drawing.

The examination in Drawing will be on the papers used at the Art School examinations in Primary and advanced Geometry and Perspective and in Model, Memory and Blackboard Drawing.

For the rest of the course the examinations will be held in July, and application with the fee of $5 should be sent to the Public School Inspector not later than the 24th of May.

Books of reference recommended by the examiners:—

The Canadian Accountant. By Beatty and Johnson.
Expert Book-keeping. By C. A. Fleming, Owen Sound.
The Theory of Finance. By Geo. King. C. & E. Layton, Farringdon St., London, E.C.
Money and the Mechanism of Exchange. By W. S. Jevons. The Humboldt Publishing Co., New York.
Banking Act of 1890. The Carswell Co., Adelaide St., Toronto, Ont.
The Laws of Business. By C. A. Fleming.
Expert Book-keeping. By C. A. Fleming.
Complete Phonographic Instructor. By Sir I. Pitman.

II.—The Public School Leaving Examinations.

The Regulations in regard to this were amended in 1899 and now read as follows:—

The Public School Leaving Examination is identical with the examination prescribed for Part I. of Junior Leaving Standing. Public School Leaving Certificates are issued by the Public School Inspector to all pupils of Public Schools in his inspectorate who pass the examination of Part I. of Junior Leaving Standing. The holders of Public School Leaving Certificates dated before 1899 will be entitled to certificates of having passed the examination of Part I. Junior Leaving Standing by passing the examinations in Arithmetic and Mensuration, Grammar and History, the prescribed percentage on the total of these subjects being also exacted.

Part I., Junior Leaving Standing.—The subjects prescribed for Part I. of Junior Leaving Standing are the following: Reading, Drawing, Geography, Botany (or Agriculture), Writing with Book-keeping and Commercial Transactions, English Grammar, English Literature, Arithmetic and Mensuration, English Composition and History. The course in Agriculture

will include part of what is taken up in the authorised text book. For 1900 no examination will be held in Reading, English Literature, Drawing, Book-keeping, Botany (or Agriculture), but no name of a student who has not given due attention to these subjects is to be included in the confidential report of the Principal.

No grant to a High School will be paid until the Principal and Chairman of the School Board report that each obligatory subject of the course, whether prescribed for examination or not, has, in their judgment, received due attention on the part of the pupils while attending the school.

It is expected that throughout the course, until pupils have completed what is required for Part I. of Junior Leaving Standing, at least two half-hour lessons per week will be given regularly to Reading, and an equal time to English Literature. Regarding Drawing, Book-keeping, Botany or Agriculture, at least two half-hour lessons per week for each of these subjects are to be given reguarly to pupils enrolled in Form I. of the High School or Form V. of the Public School; that is, practically, during the first year of the course in preparation for Part I. of Junior Leaving Standing.

Public School Leaving Examinations 1892–99 (from the Report for 1899).

Year.	No. of Candidates examined.	No. of Candidates passed.
1892	432	195
1893	539	268
1894	2,021	690
1895	2,630	1,395
1896	3,239	1,826
1897	4,578	2,242
1898	5,280	1,980
1899	4,368	2,825

Entrance Examinations, 1877–1899 (taken from the Report for 1899).

Year.	No. of Candidates examined.	No. of Candidates passed.
1877	7,383	3,836
1882	9,607	4,371
1887	16,248	9,364
1892	16,409	8,427
1897	16,314	10,502
1898	16,861	9,611
1899	16,309	10,604

III.—Continuation Classes.

An interesting development of the Public Schools in Ontario is the "Continuation Classes," an outgrowth of the elementary school that connects it more closely with the higher educational grades, High School, &c. The following is taken from the Report for 1899:—

Continuation Classes.—Under the provisions of the Amendment of 1899 to the Public Schools Act, the course of study for Continuation Classes is extended to include the subjects prescribed for Form II. of the High School course. More advanced work of the High School may be taken up if requested by the Trustees and approved by the Public School Inspector. In Class (*a*) the Principal must give regular instruction to pupils of Form V. or to those doing higher work. In the other classes, the teachers must have such qualifications as are approved by the Public School Inspector.

There are now four grades of Continuation Classes, viz.:—(*a*) Schools in which the Principal holds a First Class Certificate and gives regular instruction only to pupils of Form V., or to those doing higher work. (*b*) Schools in which there are at least two teachers, and a class in regular attendance of at least ten pupils who have passed the High School Entrance examination. (*c*) Schools where there are at least five; and (*d*) in which there are at least three, who have passed the High School Entrance examination, and are in regular attendance.

No grant will be paid for Continuation Classes unless the Inspector reports that the obligatory subjects, whether prescribed for examination purposes or not, have received proper attention. The grant will be paid according to the nature and extent of the work done, and not on the results of examinations. In order that a school may obtain the grant, it will be necessary that the minimum number of pupils be enrolled during each month of the full academic year.

It should be understood that no pupil, unless he intends to become a teacher, is required to write at the examination for Part I. Junior Leaving Standing (Public Schools Leaving). No grant will be paid to a school on account of the success of pupils at the Public School Leaving examination, and a school entitled to rank in one of the grades for Continuation Classes, will receive its share of the appropriation for such classes, even if no pupils from the school should become candidates at any examination. The Legislative Grant for a Continuation Class will depend upon the number of the different grades in the Province, and cannot be determined until the County Inspectors make their reports for Continuation Classes to the Education Department. It should be recollected that the success of pupils at the High School Entrance examination in no way affects the question of whether or not a school is entitled to be placed in any of the grades for the academic year then ending.

IV.—The Course of Study in Public and High Schools.

(Remarks from the Report for 1899).

a. Agriculture.—It is of the first importance that the training given in our High and Public Schools should be as practical as possible, and that the subjects taken up in the Public Schools and also in the lower Forms of the High Schools should have in view the pursuits that will necessarily be followed by the great majority of our citizens. The fact should not, however, be overlooked, that the value of the training given in our schools does not depend so much upon the knowledge gained as the habits which the pupils form. If, in all matters that pertain to character building, the work of the schools is of the proper kind, the subjects to be taken up are of secondary importance. If the influence of the teacher makes the pupil intelligent, industrious and law-abiding, the amount of Grammar, Arithmetic, Algebra, etc., acquired will not be a matter of prime importance. After all, only the beginning of an education can be gained at best in our schools, and if pupils go forth to the active duties of life with correct principles of conduct inculcated, it may be assumed they will become valuable members of society. . . . It is a fact, however, that only a small proportion of the pupils attending the Public Schools ever enter a High School, and that of those who attend our secondary schools only a fraction will ever be enrolled in our Universities. Under these circumstances, it must be admitted that the requirements of the masses of children must control in determining the courses of study to be taken up. No course of study for our Public Schools can be commended that overlooks the needs of the farming community. For many years Agriculture was an optional branch for the elementary schools. For the first time the subject is made compulsory for rural schools. Every pupil in the Fifth Form, and even in the Fourth Form of these Schools, is now required to give attention to Agriculture. Valuable results may be predicted if the subject is taken up carefully by our Public School teachers. It is well known that the study of Agriculture really embraces the study of certain departments of elementary Science, and that the knowledge to be gained is not valuable to agriculturists alone, but should be valuable to every young person in the Province. In this connection it is to be hoped that "Nature Study," as work of this kind is often called, will hereafter receive greater prominence in all our elementary schools. Some of our Public School Inspectors are giving special encouragement to studies of this kind, and the pupils in our rural schools are having their attention more frequently directed to the beauties of nature and the intellectual gain resulting from an examination of the elementary features of Botany, Geology, Zoology, Chemistry, etc.

The following circular was issued by the Education Department in 1899:—

Circular to Members of Municipal Councils and School Boards.

I wish to call your attention to the provisions of an Amendment to the Public Schools Act, passed at the last Session of

the Legislative Assembly, and assented to the 1st of April, 1899. This Statute, entitled "An Act to improve the laws respecting Public Schools," gives important powers to Municipal Councils and Trustee Boards. The section of the Act reads as follows:—

"(1) The council of every municipality may, subject to the Regulations of the Education Department, employ one or more persons holding the degree of Bachelor of the Science of Agriculture or a certificate of qualification from the Ontario Agricultural College, to give instruction in Agriculture in the separate, public and high schools of the municipality, and the council shall have power to raise such sums of money as may be necessary to pay the salaries of such instructors, and all other expenses connected therewith. Such course of instruction shall include a knowledge of the chemistry of the soil, plant life, drainage, the cultivation of fruit, the beautifying of the farm, and generally all matters which would tend to enhance the value of the products of the farm, the dairy and the garden.

"(2) The trustees of any public, separate or high school or any number of boards of such trustees, may severally or jointly engage the services of any person qualified as in the preceding section for the purpose of giving similar instruction to the pupils of their respective schools, providing always that such course of instruction shall not supersede the instruction of the teacher in charge of the school, as required by the regulations of the Education Department.

"(3) As far as practicable, the course of lectures in agriculture by such temporary instructor shall occupy the last school period of each afternoon, and shall be open to all residents of the school section or municipality."

By the late amendments to the Regulations of the Education Department, the programme of study for Public Schools has been amended so as to make Agriculture a compulsory subject in all rural schools. This addition to the course of study will enable the pupils of all country districts to gain some valuable though elementary knowledge of what must necessarily concern a farming community. As may be expected, the information gained by means of the instruction given by the teachers and by the study of the authorised text-book, will necessarily be limited, in view of the age of the pupils. At the same time, their minds will be prepared to take a deeper interest than they otherwise would do in matters concerning the most important industry of the Province. The provisions of the section of the Amendment quoted will show that the local authorities are now vested with power to supplement largely the instruction gained in the Public Schools. It is well understood that a keener interest in agricultural matters has been fostered by means of Farmers' Institutes. I wish to urge upon all persons concerned the importance of taking advantage of the provisions of the late Amendment to the Statute, in order to continue in a more advanced form that instruction in Agriculture, the foundations for which are laid in all our rural schools.

b. Manual Training.—Manual Training is now an optional subject of the High School and Public School courses of study, and much attention has been given in Canada within the last year to this modern department of educational work. The progress of science, in this latter part of the nineteenth century, has revolutionised all our industries, and it is safe to predict that in the approaching century many changes may be expected regarding the relative values of different branches of study. The curriculum of fifty years ago will not do to-day, and unless the Province realises the important changes in the world's progress, it would be unreasonable to expect the laudable position, which our schools have held in the past, to be retained. In the United States, as well as in England and Germany, technical training has come to the front as an educational topic of discussion. In those countries, manual training has become a well recognised department of elementary and secondary education. It will not suffice to limit the benefits of technical education to those who are enrolled in universities or even in attendance at High Schools. A limitation of this character would be unreasonable, in view of the fact that such a very small percentage of persons ever attend the higher seats of learning. Technical education must, in its more elementary forms such as manual training, be taken up in the Public Schools, if we are to have well trained mechanics, farmers and merchants.

Education, to be effective, must not be one-sided. The intelligent use of the brain is no more needed than the intelligent exercise of the physical activities. Skilful hand-work is really mind work in a high degree. The hand should be made to become the servant of the mind. Instruction in elementary science, free-hand and geometrical drawing, modelling in clay, etc., may be made to incite a love for that self-activity which it is the duty of the teacher to cultivate. Instruction in manual training will cultivate the perceptive faculties; will create love for manual skill, dexterity, and taste for design; it will induce young persons to observe for themselves, to acquire knowledge at first hand, and to make them more self-reliant. The fact should not be overlooked that by far the larger number of men in every civilised community are workers, and therefore a skilled hand becomes as important as a well filled head. It is unfortunately true that in many departments of industry at the present day, there are too few skilled artisans to put into form the ideas of the designers. The unrest sometimes found among working classes arises from a lack of that skilful training which would enable them to make good use of their opportunities. To furnish that training which enables boys and girls to earn an honest living should be an important aim of every school. It is often said that the brightest boys come from the country. If the statement is analysed, it will be found that the main advantage which the country boy has over the one from the city is that he has had the advantage of manual training, which is too often entirely denied to the one from the city.

The advance of applied science, with the resulting subdivision

of labour so marked at the present day, has rendered instruction in technical education essential, in view of the changed economic conditions. Years ago the mechanic was usually proficient in the various departments of his work. His training enabled him to make a complete article, and he did not confine his attention to few processes. The work of the shoemaker, the blacksmith, the carpenter, etc., is very different from what it was half a century ago. The country must adapt itself to the new requirements.

c. Temperance and Hygiene.—It is also worthy of notice that the number of pupils receiving instruction in Temperance and Hygiene has increased from 33,926, in 1882, to 219,776, in 1898. Having regard to the great importance of the knowledge of physiology and the injurious effects of alcoholic stimulants on the human system, provision was made by the statute in 1886 for placing this subject on the course of study for Public Schools. Instruction was also provided under departmental regulation for teachers-in-training at County Model Schools and Normal Schools, to be followed by an examination as an essential pre-requisite to their final recognition as duly qualified teachers. In 1893, this subject was made compulsory for entrance to High Schools and Collegiate Institutes, so that no pupil who pursues his studies as far as the Fifth Form can fail to be reasonably well acquainted with the conditions on which his health and physical vigour depend, as well as with the dangerous tendency of stimulants and narcotics to produce weakness and disease.

V.—Separate Schools in 1898.

a. Roman Catholic Separate Schools.

Year.	Schools—Expenditure—Teachers.				Number of pupils attending—Number of studies.							
	School open.	Total receipts.	Total expenditure.	Teachers.	Pupils.	Reading.	Writing.	Arithmetic.	Geography.	Grammar	Drawing.	Temperance and hygiene.
1867	161	48,628	42,719	210	18,924	18,924	10,749	10,559	8,666	5,688	—	—
1872	171	68,810	61,817	254	21,406	21,406	13,699	12,189	8,011	7,908	—	—
1877	185	120,266	114,806	334	24,952	24,952	17,932	17,961	13,154	11,174	—	—
1882	190	166,739	154,340	390	26,148	26,148	21,052	21,524	13,900	11,695	7,548	2,033
1887	229	229,848	211,223	491	30,373	30,373	27,824	28,501	19,608	18,678	21,818	8,578
1892	312	326,034	289,838	662	37,466	37,466	35,565	35,936	26,299	22,755	32,682	11,056
1897	340	335,324	302,169	752	41,620	41,620	39,724	40,165	27,471	26,071	36,462	18,127
1898	345	389,185	349,481	744	41,667	41,667	41,473	41,396	29,578	24,138	37,345	17,964

b. Protestant Separate Schools.

The complete list of Protestant Separate Schools is as follows: No. 5 Bromley, No. 9 Cambridge, No. 1 Marlboro', No. 6 Plantagenet North, Puslinch, Rama, L'Orignal, Penetanguishene.

They were attended by 505 pupils. The whole amount expended for their maintenance was $4,895. One teacher held a First Class, five a Second Class, five a Third Class, and one a Temporary Certificate.

VI.—High Schools.

a. Diffusion of High School Education (from the Report for 1899).

When the High School System of the Province was first inaugurated, its primary object was to prepare pupils for the learned professions, and especially for the University. While in that respect our High Schools amply fulfil their original purpose, in later years the course of education which they provide has been considered a desirable qualification for various other pursuits in life. Many young men in preparing for mercantile life or for agriculture take advantage of the High School, perhaps not so much because of the direct training which it gives for their intended calling as for the superior culture which it provides. In 1872, 486 High School pupils when they had finished their High School education entered mercantile life. In 1898 the number had increased to 1,491. Similarly (in 1872) 300 High School pupils left the High School for agricultural pursuits, and in 1898, 1,050 pupils pursued a similar course. In all, the High Schools gave to mercantile life and to agriculture in 1898, 2,541 pupils of well recognised educational standing, and to the Universities and learned professions the same year, 1,336. The whole number who left the High School for mercantile life since 1872 was 24,094, and for agriculture, 18,920.

b. Tendencies of High School Education, 1867 to 1898.

The following figures in regard to High School studies, together with some remarks suggested by them, are taken from the Report for 1899:—

Year.	Languages.				Drawing.	Vocal Music.	Book-keeping and commercial transactions.	Left for mercantile life.	Left for agriculture.	Who joined learned profession.	Matriculated.	Number of schools charging fees.
	Latin.	Greek.	French.	German.								
1867	5,171	802	2,164	—	676	—	1,283	—	—	—	56	57
1872	3,860	900	2,828	341	2,176	—	3,127	486	300	213	78	28
1877	4,955	871	3,091	442	2,755	—	3,621	555	328	564	145	35
1882	4,591	815	5,363	962	3,441	—	5,642	881	646	751	272	37
1887	5,409	997	6,180	1,350	14,295	1,955	14,064	1,141	882	791	305	58
1892	9,006	1,070	10,398	2,796	16,980	948	16,700	1,111	1,006	398	471	77
1897	16,873	1,421	13,761	5,169	12,252	160	11,647	1,368	1,153	409	652	97
1898	19,313	1,456	13,866	6,288	10,947	30	11,026	1,491	1,050	499	837	79

From a study of the classification of High Schools and Collegiate Institutes, two or three very striking changes in the tendency of higher education may be worthy of notice. For instance, in 1867, only 1,283 pupils, or 23 per cent. of the whole number, studied commercial subjects, such as book-keeping; in 1898 this subject was taken by 11,026 pupils, or 47 per cent. of the whole attendance. In 1867, 5,171 pupils, or 90 per cent. of the whole attendance, studied Latin; in 1898 the number of pupils in Latin was 19,313, about 83 per cent. of the number in attendance. In 1867, 15 per cent. studied Greek; in 1898, only six per cent. were engaged in studying this subject. In 1867, 38 per cent. of pupils studied French, and none studied German; in 1898 these numbers had increased to 60 per cent. and 27 per cent. respectively. There also has been a large increase in the number studying Drawing, the total in 1867 being 676, and in 1898, 10,947.

c. Departmental Instructions for the High School Entrance Examination, 1900.

(i.) No teacher who has pupils writing at the High School Entrance Examination is eligible as Examiner where such pupils are writing.

When the County Council recommends the holding of an examination at any place other than the High School, the presiding examiner shall be paid the sum of $3 per diem, and travelling expenses, for conducting such examination, and the examiners shall be allowed the sum of $1 per candidate for reading the examination papers. It shall be lawful for the County Treasurer to pay all the expenses of such examination on the certificate of the County Inspector.

(ii.) *Duties of Inspector.*—The Inspector shall notify the Department not later than the 3rd day of May in each year, of the number of persons desiring to be examined at any High School or other authorised place within his jurisdiction.

In any city or town forming a separate inspectoral division, the Inspector or Inspectors of such city or town shall preside at the examinations, and in conjunction with the Board of Examiners for such city or town, shall read the papers and report to the Department.

In counties in which more High Schools than one are situated, the Inspector for the county shall elect at which High School he will preside, and shall notify the Department of the choice he makes, and in each of the other High Schools the Principal of the High School shall preside.

In the case of examinations affiliated with a High School, the Inspector, within whose district such affiliated examinations are held, shall appoint presiding examiners, who shall be teachers in actual service, notice of which shall be sent to the Education Department; and such Inspector, together with the examiners of the High School with which the examination is affiliated, shall be the Board of Examiners in all such cases.

Where, from the number of candidates, or any other cause, additional presiding examiners are required, the Inspector shall make such appointments as are necessary, preference being given to the other members of the Board of Examiners. The inspector shall not appoint as presiding examiner any teacher who has taken part in the instruction of any of the candidates in the room where he presides, or who is not in actual service.

Where more examinations than one are held in an inspectoral division, the papers will be sent by the Education Department to the Inspector, or the presiding examiner, as the case may be.

The parcel containing the examination papers shall not be opened till the morning of the examination day, nor shall any envelope containing the papers in any subject be opened until the time appointed in the time table for the examination in such subject.

(iii.) *Duties of Presiding Examiners.*—To be in attendance at the place appointed for the examination at least fifteen minutes before the time fixed for the first subject, and to see that the candidates are supplied with the necessary stationery, and seated so far apart as to afford reasonable security against copying.

To open the envelope containing the papers in each subject in full view of the candidates, at the time prescribed, and to place one paper on each candidate's desk.

To exercise proper vigilance over the candidates to prevent copying and to allow no candidate to communicate with another, nor permit any person except a co-examiner to enter the room during examination.

To see that the candidates promptly cease writing at the proper time, fold and endorse their papers properly, and in every respect comply with the instructions given.

To submit the answers of the candidates to the examiners, according to the instructions from the Board.

(iv.) *Duties of Candidates.*—Every candidate should be in attendance at least fifteen minutes before the time at which the examination is to begin, and shall occupy the seat allotted by the presiding examiner. Any candidate desiring to move from his allotted place or to leave the room shall first obtain permission from the presiding examiner to do so. Any candidate leaving shall not return during the examination of the subject then in hand.

Every candidate shall write his answers on one side only of the paper, and shall number each answer. He shall arrange the sheets numerically, according to the questions, and fold them once crosswise, endorsing them with his name, the name of the subject, and the name of the place at which he is examined. No paper shall be returned to a candidate after being placed in the hands of the presiding examiner.

Any candidate who is found copying from another or allowing another to copy from him, or who brings into the examination room any book, note, or paper having any reference to the subject on which he is writing, shall be required by the presiding

examiner to leave the room and his paper and the papers of all the guilty parties shall be cancelled.

(v.) *Duties of Examiners.*—The papers of the different candidates shall be so distributed that the same examiner shall read and value the answers in the same subject throughout.

Marks are to be deducted for mis-spelt words and for want of neatness as indicated on the question papers.

d. The Question of Free High Schools (from the Report for 1899).

The opinion that High School Education is mainly for the benefit of the wealthy classes is held by very few of our citizens. The influence of secondary schools in promoting the excellence of elementary schools is seen in the increased ambition of pupils, who as a result not only stay longer in the Public Schools, but who do better work in consequence of the goal placed before them. The energies of Public School teachers are quickened on account of the demand made upon them by the High Schools.

. . . .

Free elementary schools have, since 1871, been guaranteed to Ontario. The question of free High Schools is left to be determined by the authorities of each municipality. Discussions have frequently arisen in many parts of the Province regarding the principle of free secondary education. The fees of county pupils attending High Schools cannot exceed $10 per annum. In many counties, commendable liberality has been shown in having county pupils admitted free or by the payment of a less amount than the minimum fee. The rule observed regarding resident pupils varies. In 51 High Schools and Collegiate Institutes, no fees are charged resident pupils. In the other institutions fees vary from $1 to $32 per annum. It would be a misfortune should the doors of our High Schools and Collegiate Institutes be closed to the children of parents in the humbler walks of life. . . . . To confine the benefits of our High Schools to the children of parents who are in a position to pay high fees will necessarily restrict the number of well-trained mechanics, merchants, and farmers.

VII.—Empire Day in Public and High Schools.

a. Circular of March, 1899.

The following extracts from a circular issued to Inspectors are taken from the Report of the Minister of Education for 1899.

In accordance with a resolution adopted by the Dominion Education Association at Halifax, N.S., in August, 1898, the Education Department of Ontario adopted the following minute on March 1st, 1899 :—

"The School Day immediately preceding the 24th of May shall be devoted specially to the study of the history of Canada in its relation to the British Empire and to such other exercises as might tend to increase the interest of the pupils in the history of

their own country and strengthen their attachment to the Empire to which they belong—such day to be known as 'Empire Day.'"

"'Empire Day' this year falls on Tuesday, the 23rd of May. It is not necessary to specify in detail how the day should be observed. The outline given below might be taken generally as a guide to teachers and trustees:—

"*The Forenoon.*—Part of the forenoon might be occupied with a familiar talk by the teacher on the British Empire, its extent and resources; the relation of Canada to the Empire; the unity of the Empire and its advantages; the privileges which, as British subjects, we enjoy; the extent of Canada and its resources; readings from Canadian and British authors by the teacher; interesting historical incidents in connection with our own country. The aim of the teacher in all his references to Canada and the Empire should be, to make Canadian patriotism intelligent, comprehensive and strong.

"*The Afternoon.*—The afternoon, commencing at 2.30 p.m., might be occupied with patriotic recitations, songs, readings by the pupils and speeches by trustees, clergymen, and such other persons as may be available.

"The trustees and public generally should be invited to be present at these exercises.

"During the day the British Flag or Canadian Ensign should be hoisted over the school building.

"Will you kindly inform the teachers of your Inspectoral District of the action of the Department and of the purposes of 'Empire Day' as herein set forth."

b. Remarks from the Report for 1899.

On the 23rd of May last, the day before the commemoration of Her Majesty's birthday, the schools of this Province, as well as of the other Provinces of the Dominion, celebrated what will hereafter mark a step in the advancement of that unity of the Empire, to which so much attention has been given of late years. It may be expected that the celebration of Empire Day will in future be characterised by the same objects as marked the event in 1899. The day is not a holiday in the ordinary sense of the term, but it may be presumed that hereafter its annual recurrence will be devoted to exercises of a patriotic character, like those of last year. Inspectors in all parts of the Province, as well as Principals of schools, deserve no small credit for the excellent manner in which the event was inaugurated. In most of the schools, part of the forenoon was taken up by the teachers with references to the history of the British Empire, and the admirable heritage which we, as subjects of Her Majesty, enjoy. In the afternoon, trustees, members of Municipal Councils, members of Parliament, clergymen, and other prominent citizens, gave addresses to the children assembled in the schools or in halls, to which the public was generally invited. . . . It is satisfactory to know that in no instance does there appear to have

been any disposition to cultivate what is termed the "jingo spirit" among the pupils attending our Public Schools. . . . . The events which have lately been transpiring in another part of the Empire have brought to the attention of all our citizens the common interest felt by all who live under the British flag. There need be little fear, I think, of any tendency on the part of the people of this Province to become fond of war or anxious to depart from those principles of government which had influence for so many years in the preservation of peace. . . . . In the addresses given in many places attention was directed to those ideals of liberty which have guided our statesmen, to the advance of education, the growth of tolerance, the progress of self-government, and the improvement in the moral atmosphere among Anglo-Saxon communities. Attention was doubtless called, and properly so, to the magnificent resources of our country, to the literature and art left us by our British ancestry, and to the distinguished men and women who have given their talents, their means, and even their lives, for the promotion of Christian civilisation. The opportunity appears to have been well employed for filling the minds of the pupils with the highest kind of patriotism—a patriotism inspired by a higher conception of civic duty, improved devotion to the public interests, willingness to offer personal service in behalf of one another, and a disposition to give assistance for the promotion of social improvement. . . . . It is evident that exercises of this character cannot fail to impress the children attending our schools with the great blessings possessed by those who have reaped the advantage of centuries of progress towards the highest type of constitutional government.

VIII.—University Education.

a. From the Annual Report of the Council of the University of Toronto for the academical year 1898–99.

For some years past the Departments of Psychology and Physics have been in urgent need of increased accommodation for lecture rooms and laboratories. Previously to the present session it has been impossible to provide for these requirements. Owing to the closing of the University College residence, however, the Council has been enabled to make arrangements for the utilisation of a portion of the residence wing for this purpose. Several vacant rooms have been fitted up at small expense, and thus temporary facilities have been furnished for some of the more pressing needs of these Departments, as well as for the work of advanced students, both graduate and undergraduate, who are prosecuting researches under the direction of the staff.

In consequence of the increased numbers of students in several Departments, there is a growing need for two large lecture-rooms, similar to those in the Chemical and Biological Buildings. This want is especially felt in the departments of History and Psychology. Hitherto these Departments have been obliged to make use of the examination halls in the main building, which are extremely unsuitable for lecture purposes.

The Council begs to direct the attention of your Honour to the increased necessity which exists for the re-organisation of the Department of Mineralogy and Geology and for its establishment on a basis commensurate with the importance of these subjects of study, and on a parallel with the provision which has been made for the teaching of the other sciences.

With the close of the academic session, Dr. Pike severed his connection with the University, after almost twenty years of service as Professor of Chemistry. Under his administration the Department of Chemistry has made remarkable progress; especially in the practical work of the laboratory and in the introduction and encouragement of the work of research. Under his direction also the present Chemical Building was erected, and its admirable arrangements are almost wholly owing to his skill and foresight.

b. The following tables exhibit the numbers attending the Pass and Honour Lectures in University subjects.

PASS.

Subjects.	Mathematics.	Physics.	Chemistry.	Biology.	Mineralogy and Geology.	Philosophy.	Logic.	Political Science.	History.
First year	132	37	–	85	–	–	–	–	–
Second year	–	6	9	–	35	138	128	–	80
Third year	–	7	–	–	–	–	–	40	37
Fourth year	30	–	–	–	–	32	–	65	31
Totals	162	50	9	85	35	170	128	105	148

In no case do the numbers given above include honour students. Instruction in Physics, Biology and Chemistry was given to 63 students of the first year in Medicine, and in Physics to 73 students of the first year and to 40 students of the second year in the School of Practical Science.

HONOUR.

Subjects.	Mathematics.	Physics.	Chemistry.	Biology.	Mineralogy and Geology.	Philosophy.	Political Science.	History.	Spanish.	Italian.	Phonetics.
First year	36	42	55	15	–	–	–	–	13	44	47
Second year	52	32	33	12	14	18	24	27	4	21	–
Third year	13	18	17	12	13	20	24	48	4	14	–
Fourth year	7	12	3	11	2	16	24	48	2	6	
Totals	108	104	108	50	29	54	72	123	23	85	47

The second year lectures in Chemistry and the fourth year lectures in Biology were attended by 49 students of the second year in Medicine. Instruction in Mathematics was given to 73 students of the first year and to 40 students of the second year in the School of Practical Science.

c. The Laboratories.

The following table exhibits the numbers taking the practical work in the laboratories of the University :—

Laboratories.	Physical.	Chemical.	Mineralogical.	Biological.	Psychological.
Fourth year - -	12	3	2	11	16
Third year - -	18	17	13	12	15
Second year - -	13	33	14	12	–
First year - -	17	15	–	15	–
Totals - -	60	68	29	50	31

d. Numbers examined in the Faculties and Departments.

During the year thirteen hundred and thirty-four candidates were examined in the different Faculties and Departments, as follows :—

Faculty of Law - - - - - -	6
Faculty of Medicine - - - - -	190
Faculty of Arts - - - - - -	905
Department of Agriculture - - - -	11
Department of Pedagogy - - - -	6
Department of Dentistry - - - -	137
Department of Music - - - - -	10
Department of Pharmacy - - - -	63
Department of Applied Science - - -	6
Total - - - - -	1,334

e. Students in the Faculty of Medicine.

The following table exhibits the number of the students registered as in attendance upon the lectures given by the staff of the Faculty of Medicine :—

Students of the fourth year - - -	55
Students of the third year - - - -	56
Students of the second year - - -	54
Students of the first year - - - -	73
Occasional students - - - - -	70
Total - - - - - -	308

f. Subjects taught in the Faculty of Science.

Subjects taught in the Faculty of Science of the University of Toronto :—

Subjects.	Number of Students.	
	2nd Term. Session 1898-9.	1st Term. Session 1899-00.
Algebra, Euclid, Plane trigonometry, Analytical geometry, Calculus, Astronomy	108	139
Sound, Light, heat, electricity and magnetism, Hydrostatics	108	131

Practical instruction in Chemistry and Biology was given to 63 students of the first year, and to 49 students of the second year in Medicine, and in Physics to 85 students of the School of Practical Science. During the session eleven graduates in Arts were engaged in original research in the Psychological Laboratory and one in the Biological Laboratory

g. University College.

(i.) The numbers of registered students taking full or partial courses in University College were as follows :—

———	Fourth Year.	Third Year.	Second Year.	First Year.	Post-graduate.	Total.
Matriculated students	129	108	102	102	–	441
Occasional students	26	25	21	70	–	142
Extra-mural students	–	4	6	6	–	16
Graduated students	5	2	2	1	3	13
Totals	160	139	131	179	3	612

(ii.) The following tables exhibit the number of students attending the Pass and Honour Lectures in University College subjects :—

PASS.

———	Greek.	Latin.	English.	French.	German.	Orientals.	Ethics.	Ancient History.
Fourth year	7	25	54	28	11	4	–	–
Third year	5	26	67	21	12	6	38	–
Second year	20	70	65	38	35	9	–	–
First year	24	113	105	64	47	28	–	105
Totals	56	234	291	151	105	47	38	105

HONOUR.

	Greek.	Latin.	English.	French.	German.	Orientals.	Ethics.	Ancient History.
Fourth year	12	12	49	21	19	3	10	–
Third year	8	11	27	23	21	4	29	–
Second year	10	9	36	21	17	4	–	50
First year	18	27	77	53	48	–	–	27
Totals	48	59	189	118	105	11	39	77

There were during the session 170 women students in attendance at University College.

h. Subjects taught by the Faculty of the School of Science.

SUBJECTS.	Number of Students.	
	2nd Term. Session 1898–9.	1st Term. Session 1899–00.
Organic and inorganic chemistry Applied chemistry Assaying	149	181
Mineralogy and geology Petrography Metallurgy Mining and ore dressing German	83	145
Statics Dynamics Strength of materials Theory of construction Machine design Compound stress Hydraulics Thermodynamics and theory of the steam engine French	147	185
Drawing Architecture Plumbing, heating and ventilation Mortars and cements Brick and stone masonry	146	177
Surveying Geodesy and astronomy Spherical trigonometry Least squares Descriptive geometry	144	177
Electricity Magnetism Dynamo-electrical machinery Mechanics of machinery Rigid dynamics	99	110

IX.—Art Teaching.

a. Art Schools and Departmental Drawing Examinations.

Tables showing the number of Certificates awarded since the commencement of this branch of the Education Department.

(i.) Certificates awarded in Primary Art Course from 1882 to 1899.

Year.	Freehand Drawing.	Geometry.	Perspective.	Model Drawing.	Blackboard Drawing.	Teachers' Certificates.	Total.
1882	28	21	17	12	28	—	106
1883	84	89	58	47	76	—	354
1884	153	174	139	138	86	66	756
1885	214	529	301	168	198	122	1,532
1886	634	672	149	662	414	77	2,608
1887	643	1,204	428	444	122	103	2,944
1888	805	882	520	403	236	133	2,979
1889	1,002	961	394	470	494	187	3,508
1890	1,000	1,009	290	811	313	130	3,553
1891	1,085	1,569	292	746	422	164	4,278
1892	1,361	1,419	569	1,120	720	338	5,527
1893	1,769	1,277	439	876	392	220	4,973
1894	1,383	719	548	550	562	153	3,915
1895	1,813	1,429	658	1,311	991	341	6,543
1896	1,195	569	361	1,110	1,121	265	4,621
1897	716	500	212	704	516	114	2,762
1898	854	311	173	1,224	604	149	3,315
1899	1,062	465	168	1,128	1,170	160	4,153
Total	15,801	13,799	5,716	11,924	8,465	2,722	58,427

(ii.) Certificates awarded in Advanced Art Course from 1883 to 1899

Year.	Shading from flat.	Outline from round.	Shading from round.	Drawing from flowers.	Ornamental Design.	Industrial Design.	Teachers' Certificates.	Total.
1883	5	5	12	18	—	—	—	40
1884	16	5	12	12	—	—	—	45
1885	33	18	35	29	—	—	4	119
1886	35	24	19	48	—	—	3	129
1887	59	27	28	25	34	—	14	187
1888	22	17	39	44	20	—	9	151
1889	65	36	58	24	25	—	14	222
1890	62	30	76	43	22	—	15	248
1891	80	52	67	66	38	—	23	326
1892	24	32	53	72	37	—	13	231
1893	58	54	73	62	54	—	13	314
1894	31	44	58	79	68	—	24	304
1895	56	52	78	58	29	—	11	284
1896	60	74	103	113	—	29	17	396
1897	61	47	126	95	—	41	18	388
1898	67	73	169	187	—	44	18	558
1899	61	69	152	160	—	57	22	521
Total	795	659	1,158	1,135	327	171	218	4,463

(iii.) Certificates awarded in Mechanical Drawing Course from 1883 to 1899.

Year.	Advanced Geometry.	Machine Drawing.	Building Construction.	Industrial Design.	Architectural Design.	Advanced Perspective.	Teachers' Certificates.	Total.
1883	2	3	1	2	–	3	–	11
1884	1	1	1	1	–	1	–	5
1885	12	32	4	25	–	12	4	89
1886	14	13	5	28	–	14	3	77
1887	6	5	12	18	–	6	2	49
1888	8	7	7	15	–	11	2	50
1889	13	23	11	20	–	12	3	82
1890	11	23	5	8	–	12	2	61
1891	3	31	8	31	–	28	2	103
1892	17	25	13	38	–	15	2	110
1893	14	33	10	47	–	35	10	149
1894	12	17	6	90	–	9	3	137
1895	5	22	9	31	–	12	3	82
1896	7	9	5	–	9	12	3	45
1897	16	13	4	–	6	15	–	54
1898	6	19	2	–	7	8	–	42
1899	25	20	5	–	7	18	–	75
Total	172	296	108	354	29	223	39	1,221

(iv.) Certificates Awarded in Industrial Art Course from 1885 to 1899.

Year.	Modelling in Clay.	Wood Carving.	Wood Engraving.	Lithography.	Painting on China.	Total.
1885	14	–	–	–	–	14
1886	11	7	–	–	–	18
1887	8	2	–	–	–	10
1888	10	3	1	1	9	24
1889	7	1	3	2	6	19
1890	7	4	–	1	6	18
1891	5	2	1	–	7	15
1892	2	1	–	1	3	7
1893	5	2	–	1	3	11
1894	4	2	–	2	10	18
1895	5	3	2	6	18	34
1896	3	2	–	3	30	38
1897	5	3	1	4	17	30
1898	7	5	–	1	17	30
1899	9	14	–	2	17	42
Total	102	51	8	24	143	328

(v.) Certificates awarded for Extra Subjects from 1885 to 1899.

Year.	Drawing from the antique.	Shading from casts.	Architectural designs.	Drawing from life.	Painting from life.	Painting oil colours.	Painting water colours.	Sepia.	Monochrome.	Pastel.	Sculpture in marble.	Photogravure.	Repoussé work.	Industrial design.	Pen and ink.	Machine drawing.	Engraving on copper.	Crayon portraits.	Total
1885	–	–	–	–	–	9	7	–	–	–	–	–	–	–	–	–	–	–	16
1886	–	–	–	–	–	12	7	–	–	–	–	–	–	–	–	–	–	–	19
1887	–	–	–	7	–	32	9	–	–	–	–	–	2	–	–	–	–	–	50
1888	–	–	–	15	12	25	14	13	1	–	2	–	2	–	–	–	–	–	84
1889	–	–	–	12	8	16	21	3	2	–	–	–	–	–	–	–	–	–	62
1890	–	–	–	7	4	28	18	10	4	–	–	–	–	–	–	–	–	–	71
1891	–	–	–	4	5	29	26	3	6	–	–	–	–	–	–	–	–	–	73
1892	–	–	–	2	6	21	16	7	1	–	–	–	–	–	–	–	–	2	55
1893	11	–	2	5	9	35	21	7	4	–	–	–	–	–	–	–	–	–	94
1894	11	–	2	8	6	29	16	5	7	–	–	–	–	10	–	1	–	–	95
1895	26	–	6	14	4	39	24	10	1	–	–	–	–	17	–	5	1	–	147
1896	14	–	–	12	6	34	38	6	1	2	–	1	–	13	1	1	–	–	129
1897	19	11	1	17	6	38	42	7	3	3	–	3	–	22	3	4	–	–	179
1898	22	12	–	12	9	37	28	7	6	6	1	6	–	15	4	6	–	–	171
1899	19	14	–	17	2	10	22	8	1	4	–	3	–	31	13	5	–	–	149
Total	122	37	11	132	77	394	309	86	37	15	3	13	4	108	21	22	1	2	1,394

b. Literary and Scientific Societies receiving grants.

The following Institutions receive Legislative Grants: 1. Hamilton Literary and Scientific Institution; 2. Kingston School of Mining; 3. Ontario Historical Society; 4. Ottawa French Canadian Institute; 5. Ottawa Literary and Scientific Society; 6. Ottawa St. Patrick's Literary and Scientific Association; 7. Ottawa Field Naturalist Club; 8. Toronto Canadian Institute; 9. Toronto Astronomical and Physical Society.

All of these Institutions give popular lectures on literature or science; some of them publish their transactions and others have museums, all of which are greatly appreciated by the public and assist in developing a taste for Literature, Science and Art.

c. Progress of School Architecture and Decoration.

Extract from an inaugural address given by Dr. S. P. May, Superintendent of Art Schools, to the officers and members of the Dufferin Art School League, in December 1899.

A History of the Progress of School Architecture and the Decoration of School Rooms in the City.

It is not generally known, and I presume that even some members of the Advisory Board for School Art Leagues are not aware, that fifty years ago the Education Department supplied architectural plans for the erection of school houses. The late Chief Superintendent of Education, the Rev. Dr. Ryerson, the founder of the public school system, whose memory we all revere, and whose name will be handed down to posterity as a great Canadian educationist, philanthropist and true Christian, was the first man in Canada to direct public attention to the importance of school architecture.

It was through his exertions that in 1850 Parliament voted the sum of £200 per annum for purchasing plans, engravings, etc., for the improvement of school architecture; these plans were published and distributed from time to time through the Upper Canada Journal of Education, and eventually school trustees made so many applications for specifications for erecting school buildings, that it became necessary for a book to be published on this subject.

In 1857 Dr. Hodgins, then Deputy Superintendent of Education, published under the authority of the Chief Superintendent, "The School House, its architecture, external and internal arrangements." This book was profusely illustrated with engravings of elevations and plans for school buildings, and was of great value in awakening an interest in school architecture, for, as some of us remember, at that time we had a large number of log school houses, and the trustees of rural schools seemed satisfied that so long as they could afford shelter for the school children, they need make no attempt to make the school attractive to the pupils; they considered learning to be a good thing, and approved of children attending school, but they did not care about external architectural beauty, nor the internal decoration of school rooms.

In 1859, two years after the publication of "The School House," the grant for school architecture was increased to $800.00 per annum.

In 1872 the Education Department offered prizes to Inspectors and Teachers for the best architectual designs and plans for rural school houses. Thirty persons competed, and seventeen awards were made to the value of $230.00; seven prizes were taken by school inspectors, and ten by school teachers.

In 1876 a new edition of "The School House," with illustrated papers on School Hygiene and Ventilation, was published by Dr. Hodgins. I consider that a proper attention to Light, Heat, and Ventilation is of more importance than external decorations in the construction of school buildings. If school rooms are not well ventilated and lighted, most injurious effects are produced on the mental development and physical health of children, which are often felt in after life. It is a well known hygienic fact that if a child breathes foul air, he is in a state of physical discomfort; consequently in his undiscriminating mind the feelings of pain

and lassitude are associated with school, and cause a dislike for books and study.

The ill health of pupils and teachers, sometimes credited to overwork, is frequently due to draughts and foul air in the school room.

Another important thing is the arrangement of light in the school room. We frequently find windows on the right of the desks of the pupils, and sometimes on three or four sides of a room; this, together with the white walls, and interminable blackboards surrounding the children, no doubt produces Myopia or nearsightedness; and how frequent it is that we now see school children using spectacles; fifty years ago such a thing was unknown.

In the same year, 1876, the Education Department exhibited at the Centennial Exhibition models of school buildings for Collegiate Institutes, Public Schools in cities and towns, also for Schools in rural districts, made to a working scale with ground plans and references as to cost of erection, accommodation, etc. At the close of the exhibition these models, which were much sought after by foreign educationists, were divided between the representatives of Japan and the United States. We also exhibited large framed photographs of Collegiate Institutes, High Schools, and Public Schools erected in different parts of this Province.

I may mention that a similar collection of large photographs for the Paris Exposition of 1900 has been prepared under the authority of the Hon. Mr. Harcourt, Minister of Education.

In 1886, Dr. Hodgins, under the direction of the Hon. Adam Crooks, first Minister of Education, published "Hints and Suggestions on School Architecture and Hygiene," with plans and illustrations, and I may here state that the Education Department is now offering prizes for the best architectural plans for school houses.

In regard to the internal decoration of school houses I may say that from 1851 to 1878 the Educational Depository supplied schools at half cost price with historical and other prints and engravings, which were reproductions of the works of Raphael and other old masters, together with plain and coloured engravings by Landseer and other modern painters, also small busts of eminent and celebrated men of ancient and modern times.

The annual reports of the Chief Superintendent and the Ministers of Education show that after good school houses had been erected, internal decoration was not uncommon. I claim, therefore, that the Education Department of this Province took the lead of all other countries in encouraging the decoration of public school walls with pictures, engravings, plaster casts, etc.

It was not until 1880 that France commenced the æsthetic culture of the pupils of common schools. In that year a commission of thirty eminent men were appointed to report on the decoration of schools, and art for schools. This commission was charged with the duty of studying the means of introducing into the system of instruction the æsthetic education of the eye. Its labours extended over a year. In the report it is said: "The special task of this commission was to devise means and ways for

improving æsthetic education through the eye, not by specific direct instruction set forth in programmes, but by the operation of the environments of the school, and the artistic character of its appliances. These environments and appliances were considered by the commission mainly under four heads: 1. The æsthetic character of the school building, including its artistic ornamentation, both exterior and interior; 2. The furnishing of objects of art for the observation and study of the pupils; 3. The rewards of merit; 4. Illustrating apparatus."

Soon after this a Committee was appointed in Manchester, England, with similar functions to those of the French Commission. This was followed by the organisation of an association with the same object in view, in London, England, with Mr. Ruskin as President.

In 1883, the Committee on Drawing of the Boston School Board called attention to what had been done in this direction in Manchester and London, and suggested the advisability of organising a similar association for their schools. In this connection it remarks: "We hold with the English Committee that a love for the beautiful is perhaps only second to religion as a protection against the grosser forms of self-indulgence, and that it can best be kindled at an age when the mind is specially susceptible to the influence of habitual surroundings."

About the same time our present Premier, the Hon. Dr. Ross then Minister of Education, introduced mural decoration in the school buildings under Government control; the walls of the Toronto and Ottawa Normal Schools were either tinted or papered, and decorated with oil paintings, reproductions of the different ancient and modern Schools of Art, and life-size busts of distinguished men of ancient and modern times, thus surrounding the teachers in training with examples of art, and studies of the great and good. The result which followed and will follow we cannot calculate, for we know that in human culture the most potential forces impressed on our minds are produced by our environments; that although these forces are imperceptible and scarcely seem to have existence, they cause an unconscious tuition, an invisible intangible influence on our minds, to which no resistance can be made because its very existence is unnoticed and unknown.

X.—Public Libraries.

a. Public Libraries (not free).

The following extracts are taken from the annual reports for the year ending 30th April, 1899:—

1. *Classification of Public Libraries Reporting 1898–99.*

Public Libraries, with libraries, reading rooms and evening classes	2
Public Libraries, with libraries and reading rooms	128
Public Libraries, with libraries only	117
Total	247

2. *Public Libraries—Receipts and Balances on hand.*

The total receipts of Public Libraries was	$75,875 36
Balances on hand	5,969 83

3. *Public Libraries—Expenditure.*

The total expenditure of 247 Public Libraries was	$69,905 53

4. *Public Libraries—Assets and Liabilities.*

Assets of 247 Public Libraries	$358,395 72
Liabilities of 247 Public Libraries	16,021 00

5. *Number of Members in Public Libraries.*

247 Public Libraries have 32,249 members.

6. *Number of Volumes in Public Libraries and Number of Volumes Issued.*

Number of volumes in 247 Libraries	436,124
Number of Volumes issued in 247 Libraries	734,642

7. *Reading Rooms in Public Libraries.*

128 Libraries reporting have reading rooms.
128 Libraries subscribed for 2,717 newspapers and periodicals.

8. *Evening Classes in Public Libraries.*

2 Libraries had 35 pupils in the drawing courses.

b. Evening Classes in Public Libraries, 1898-9 (from the Report for 1899).

Public Libraries.	Number of Students.	Primary Course.
Galt	9	Practical Geometry.
	20	Descriptive Geometry, Machine Drawing and Advanced Perspective.
Peterboro'	14	Machine Drawing.
	43	

c. Certificates awarded to Public Libraries in 1899. Primary Drawing Course.

Public Libraries.	Number of Students for Examination.	Number of Proficiency Certificates.					
		Freehand.	Geometry.	Perspective.	Model.	Blackboard.	Total Proficiency Certificates.
Galt - - - -	3	1	–	–	1	–	2
	3	1	–	–	1	–	2

d. Certificates awarded to Public Libraries in 1899. Mechanical Drawing Course.

Public Libraries.	Number of Students for Examination.	Number of Proficiency Certificates.					
		Advanced Geometry.	Machine Drawing.	Building Construction.	Architectural Design.	Advanced Perspective.	Total Proficiency Certificates.
Galt - - - -	11	–	2	–	–	–	2
Peterboro' - - -	13	–	5	–	–	–	5
	24	–	7	–	–	–	7

e. Abstract showing Number of Public Libraries in each County and District.

Name.	No.	Name.	No.	Name.	No.	Name.	No.	Name.	No.
Addington -	6	Frontenac -	3	Lambton - -	12	Northumberl'd	9	Renfrew -	9
Algoma -	11	Glengarry -	3	Lanark - -	8	Ontario - -	12	Russell -	2
Brant - -	6	Grenville -	9	Leeds - -	4	Oxford - -	12	Stormont -	1
Bruce - -	22	Grey - -	17	Lennox - -	1	Parry Sound -	6	Simcoe -	15
Carleton -	8	Haliburton -	1	Lincoln - -	6	Peel - -	13	Victoria -	12
Dufferin -	10	Haldimand -	10	Manitoulin Isl'd	2	Perth - -	9	Waterloo -	13
Dundas -	7	Halton -	5	Middlesex -	12	Peterborough	3	Welland -	9
Durham -	4	Hastings -	4	Muskoka - -	5	Prescott - -	1	Wellington -	18
Elgin - -	11	Huron - -	15	Nipissing - -	4	Prince Edward	2	Wentworth	6
Essex - -	7	Kent - -	13	Norfolk - -	4	Rainy River -	3	York - -	21

The following Abstract *f* shows the progress of Public Libraries at intervals of five years since 1883, when only 93 libraries reported having 13,672 members, who borrowed 251,890 books; there are now (for the year ending 30th April 1899) 364 libraries reporting with 121,397 members and readers who borrowed 2,547,131 volumes.

In addition there are 42 libraries which did not report, or were incorporated after the 1st of May, 1899.

Free Libraries are rapidly increasing and are greatly appreciated. In 1883 only one Free Library had been established, but now the Superintendent's report shows that there are 120 Free Libraries, and that several others have been established since the 30th of April, 1899.

f.—Abstract showing the Progress of Public Libraries from 1883 to 1899.

Year.	Institutes reporting.	Number of members.	Number of evening classes.	Number of pupils.	Number of reading rooms.	Number of newspapers and periodicals.	Number of volumes in libraries.	Number of volumes issued.	Total receipts.	Total assets.
									$ c.	$ c.
1883 -	93	13,672	28	1,758	59	1,540	154,093	251,920	59,716 00	225,190 00
1888 -	167	32,016	41	1,102	104	3,041	311,048	744,466	103,843 68	403,573 75
1893 -	255	84,088	41	1,117	156	4,745	510,326	1,415,867	160,556 26	685,412 17
1898 -	347	111,208	2	79	200	5,834	789,082	2,358,140	118,783 21	870 167 54
1899 -	364	121,397	2	35	200	5,839	862,047	2,547,131	193,421 20	935.975 81

g. Free Libraries.

The following extracts are taken from the annual Reports for the year ending 30th April, 1899 (for details see Table C).

1. *Free Libraries' Receipts and Balances on hand.*

The total receipts of 117 Free Libraries was - - - - $117,545 84
Balances on hand - - - - - 8,407 05

2. *Free Libraries' Expenditure.*

The total expenditure of 117 Free Libraries was - - - - $109,138 79

3. *Free Libraries' Assets and Liabilities.*

Assets of 117 Free Libraries - - $577,580 09
Liabilities „ - - 113,902 49

4. *Number of Readers in Free Libraries.*

117 Free Libraries report having had 89,148 readers.

5. *Number of Volumes in Free Libraries, and Number of Volumes Issued.*

Number of Volumes in 117 Free Libraries 425,923
Number of volumes issued - - - 1,812,489

6. *Reading Rooms in Free Libraries.*

72 Free Libraries subscribed for 3,112 newspapers and periodicals.

XI.—Reports of the Industrial Schools, 1899.

a. Victoria Industrial School.

The total attendance for the year was 47,529 days.
The total number registered for the year was 186.
69 boys were in attendance during the entire year.
55 were sent out during the year, and 62 came in.
The attendance at present is 132 boys.
The boys are employed as follows:—

Farm	27	Printing	15
Carpenter shop	17	Engine-room	7
Tailor shop	19	Conservatories	9
Shoe shop	17	Cottages	22
Laundry	8	Bake-room	3
Kitchen	8	Office	2
Dining-room	15	School all day	11
Knitting-room	6		

b. Alexandra Industrial School.

The total attendance for the year was 9,177 days.
The total number registered was 36.
10 were in attendance during the entire year.
13 were sent out during the year and 13 came in.
The attendance at present is 25 girls.
The girls are taught to knit and sew, and to work in the kitchen, the laundry, and to do general household work.

XII.—Examination Requirements, 1900, 1901, 1902.

The following are the Examination Requirements for the years 1900, 1901, and 1902:—

a. Junior Leaving Standing - - Part I.
b. „ „ „ - - - Part II.
c. Senior Leaving Standing - - - Part I.
d. „ „ „ - - - Part II.

Note.—It is expected that throughout the course, until pupils have completed what is required for Part I. of Junior Leaving Standing, at least two half-hour lessons per week shall be given regularly to Reading, and an equal time to English Literature. Regarding Drawing, Book-keeping, Botany or Agriculture, at least two half-hour lessons per week for each of these subjects are to be given regularly to pupils enrolled in Form I. of the High School or Form V. of the Public School; that is practically during the first year of the course in preparation for Part I. of Junior Leaving Standing.

a. Junior Leaving Standing, Part I.
Geography.

The building up of the earth; its land surface; the ocean; comparison of continents as to physical features, natural products

and inhabitants; relations of physical conditions to animals and vegetable products, and of natural products and geographical condition to the occupations of the people and national progress. Form, size and motions of the earth; lines drawn on the map, with reasons for their position; relation of the positions of the earth with respect to the sun, to light and temperature; the air; its movements; causes affecting climate. Natural and manufactured products of the countries of the world, with their exports and imports; transcontinental commercial highways and their relation to centres of population; internal commercial highways of Canada and the chief internal commercial highways of the United States; commercial relations of Great Britain and her colonies. Forms of Governments in the countries of the world and their relation to civilisation. One examination paper.

Arithmetic and Mensuration.

Proofs of elementary rules in Arithmetic; fractions (theory and proofs); commercial Arithmetic; mental Arithmetic, Mensuration of rectilinear figures. One examination paper. (The questions will call for accuracy and will have special reference to the requirements of ordinary life.)

English Grammar.

Etymology and Syntax, including the inflection, classification, and elementary analysis of words and the logical structure of the sentence and paragraph; exercises chiefly on passages from authors not prescribed. One examination paper. (The questions will call for such an elementary knowledge of the subject as will be of special value in the ordinary use of the language.)

English Composition.

For examination purposes an essay of about two pages of foolscap on one of the themes prescribed by the examiners will be required. The penmanship, spelling, punctuation, construction of sentences, the logical arrangement of the thought, the literary accuracy and aptness of the language, and the general plan or scope of the whole essay will be specially considered by the examiners. One examination paper.

History of Great Britain and Canada.

Great Britain and Canada from 1763 to 1885, with the outlines of the preceding periods of British History.

The Geography relating to the History prescribed. One examination paper.

b. Junior Leaving Standing, Part II.

Note.—The subjects prescribed for Part II. of Senior Leaving Standing are the following (Regulations 46 amended); English

Grammar and Rhetoric, English Composition, English Literature Ancient History, Arithmetic and Mensuration, Algebra, Geometry, Physics, and Latin, and one of the following groups:—(*a*) French and Greek; (*b*) German and Greek; (*c*) French, German, and Chemistry; (*d*) French, Physics, and Chemistry; (*e*) German, Physics, and Chemistry; (*f*) Botany, Physics, and Chemistry.

A candidate, who has already obtained a certificate of having passed Part I. of Form II., will not be required to take the papers in Arithmetic and Mensuration, English Grammar and Rhetoric, and the obligatory Physics.

English.

ENGLISH GRAMMAR AND RHETORIC: Etymology and Syntax, including the inflection, classification and elementary analysis of words, and the logical structure of the sentence; rhetorical structure of the sentence and paragraph; exercises chiefly on passages from authors not prescribed; the main facts in the development of the language. One examination paper.

COMPOSITION: An essay, to which special importance will be attached, on one of several themes set by the examiners. In order to pass in this subject, legible writing, correct spelling and punctuation, and proper construction of sentences are indispensable. The candidate should also give attention to the structure of the whole essay, the effective ordering of the thought, and the accurate employment of good English vocabulary.

About two pages of foolscap is suggested as the proper length for the essay; but quality, not quantity, will be mainly regarded. One examination paper.

LITERATURE: Such questions only shall be set as may serve to test the candidate's familiarity with, and intelligent and appreciative comprehension of the prescribed texts. The candidate will be expected to have memorised some of the finest passages. In addition to the questions on the prescribed selections, others shall be set on a "sight passage" to test the candidate's ability to interpret literature for himself. One examination paper.

1900.

LONGFELLOW: Evangeline. A Psalm of Life, Wreck of the Hesperus, "The Day is Done," The Old Clock on the Stairs, The Fire of Driftwood, Resignation, The Warden of the Cinque Ports, Excelsior, The Bridge, A Gleam of Sunshine.

WORDSWORTH: The Education of Nature ("Three years she grew"), "She was a phantom of delight," A Lesson ("There is a flower, the Lesser Celandine"), To the Skylark, The Green Linnet, To the Cuckoo, To the Daisy, and the following Sonnets; To a Distant Friend ("Why art thou silent"), England and Switzerland ("Two voices are there"), "Milton, thou shouldst be living at this hour," Westminster Bridge, The Inner Vision ("Most sweet it is, with unuplifted eyes"), "O Friend! I know not which way I must look," To Sleep, Within King's College Chapel.

1901.

TENNYSON: Elaine, Lady of Shalott, St. Agnes' Eve, Sir Galahad, Lotos-Eaters, Ulysses, Crossing the Bar, Early Spring. "You ask me why," "Of old sat Freedom," "Love thou thy land," the six interlude songs and "Tears, idle tears," in "The Princess."

1902.

SCOTT: Lay of the Last Minstrel.

Ancient History.

(1) General outlines of Greek History to the Battle of Chæronea, 338 B.C.

(2) General Outlines of Roman History to the Death of Augustus, authorised text-book, omitting:—

(1) Greek History—Chaps. II., III., VI., VII., XI., XII., XXIV., XXX., XXXI.

(2) Roman History—Chaps. II., III., IV., V., XXIX.

NOTE.—It is desirable, however, that the teacher make oral use of such portions of the omitted chapters as are necessary to make clear the historical connections between important events.

One examination paper.

Mathematics.

ARITHMETIC AND MENSURATION: Proofs of elementary rules in Arithmetic: fractions (theory and proofs); commercial Arithmetic; mental Arithmetic; Mensuration of right parallelopipeds, pyramids and prisms; the circle, sphere, cylinder and cone. One examination paper.

ALGEBRA: Elementary Rules; Highest Common Measure Lowest Common Multiple; Fractions; Square Root; Simple Equations of one, two and three unknown quantities; Indices; Surds; Quadratics of one and two unknown quantities.

One examination paper.

GEOMETRY: Euclid, Books I., II., and III.; easy Deductions.

One examination paper.

Elementary Experimental Science (Physics)

Use of metre rule; use of calipers and vernier for more accurate metric measurements (*e.g.*, diameters of wires, thickness of glass, plates, etc.); numerical calculations in the metric system.

Use of balance.

Specific gravity, by specific gravity bottle and hydrostatic balance, of liquids and of solids.

Boyle's law; barometer; diffusion of gases.

Use of Fahrenheit and Centigrade thermometers; determination of zero and boiling point; boiling point dependent on pressure.

Expansion of solids, liquids and gases; examples.
Specific heat; latent heat; easy numerical examples.
Transmutation ot matter; indestructibility of matter.
Solution, precipitation, crystallisation and evaporation.
One examination paper.

Latin.

Translation into Latin of English phrases and easy sentences to illustrate Latin accidence and the common rules of Latin syntax.

Translation into Latin of easy narrative English based upon the first twenty-five chapters of the prescribed Cæsar.

Translation at sight (with the aid of vocabularies) from some easy prose author.

Translation from prescribed texts, with grammatical and other questions naturally arising from the extracts set for translation.

The following are the texts prescribed:—

1900: VERGIL, Aeneid, Book II.; CÆSAR, Bellum Gallicum, Book V.

1901: VERGIL, Aeneid, Book II.; CÆSAR, Bellum Gallicum, Books II., III.

1902: CORNELIUS NEPOS, Lives of Themistocles, Aristides and Hannibal; CÆSAR, Bellum Gallicum, Book IV. (omitting Chap. 17) and Book V., Chaps. 1-23; VERGIL, Aeneid, Book II. (1-505).

Two papers will be set: (1) Translation of English into Latin. (2) Prescribed texts and translation at sight, with questions on Grammar, etc.

N.B.—The Roman method of pronouncing Latin is recommended.

French.

The candidate's knowledge of French will be tested by (1) simple questions on grammar, (2) the translation of simple passages from English into French, (3) translation at sight of easy passages from modern French, and (4) examinations on the following texts:—

1900: ENAULT, Le Chien du capitaine; FEUILLET, La Fée.

1901: DE MAISTRE, Voyage autour de ma chambre; LABICHE, La Grammaire.

1900: LAMENNAIS, Paroles d'un croyant, Chaps. VII. and XVII; PERRAULT, Le Maître Chat ou le Chat Botté; DUMAS, Un nez gelé, and La Pipe de Jean Bart; ALPHONSE DAUDET, La Dernière Classe, and La Chèvre de M. Seguin; LEGOUVÉ, La Patte de Dindon; POUVILLON, Hortibus, LOTI, Chagrin d'un vieux forcat; MOLIÈRE, L'Avare, Acte III., sc. 5 (Est-ce à votre cocher. . . . sous la mienne). VICTOR HUGO, Waterloo, Chap. IX.; ROUGET DE L'ISLE, La Marseillaise; ARNAULT, La Feuille; CHATEAUBRIAND, L'Exilé; THÉOPHILE GAUTIER, La Chimère; VICTOR HUGO, Extase; LAMARTINE, L'Automne; DE MUSSET, Tristesse; SULLY PRUDHOMME, Le Vase brisé; LA FONTAINE, Le Chêne et le Roseau.

MADAME EMILE DE GIRARDIN, La Joie fait peur.

Two papers will be set: (1) prescribed texts and translation at sight; questions on Grammar; (2) the translation of English into French.

Greek.

Translation into English of passages from prescribed texts.

Translation at sight (with the aid of vocabularies) of easy Attic prose, to which special importance will be attached.

Grammatical questions on the passages from prescribed texts will be set, and such other questions as arise naturally from the context.

Translation from English into Greek of sentences and of easy narrative passages based upon the prescribed prose texts.

The following are the prescribed texts:

1900: Selections from XENOPHON, Anabasis I., in White's Beginner's Greek Book (pp. 304-428) with the exercises thereon; HOMER, Iliad I.

1901: Selections from XENOPHON, Anabasis I., in White's Beginner's Greek Book (pp. 304-428) with the exercises thereon; HOMER, Iliad I.

1902: Selections from XENOPHON, Anabasis I., in White's Beginner's Greek Book (pp. 304-428) with the exercises thereon; HOMER, Iliad VI.

Two papers will be set: (1) prescribed texts and translation at sight; questions on Grammar; (2) the translation of English into Greek.

German.

The candidate's knowledge of German will be tested by: (1) simple questions on grammar, (2) the translation of simple passages from English into German, (3) translation at sight of easy passages from modern German, and (4) an examination on the following texts:—

1900: HAUFF, Das kalte Herz, Kalif Storch.

1901: LEANDER, Träumereien (selected by Van Daell).

1902: GRIMM, Rotkäppchen; ANDERSEN, Wie's der Alte Macht, Das neue Kleid, Venedig, Rothschild, Der Bär; ERTL, Himmelsschlüssel; FROMMEL, Das eiserne Kreuz; BAUMBACH, Nicotiana, Der Goldbaum; HEINE, Lorelei. "Du bist wie eine Blume"; UHLAND, Schäfer's Sonntagslied. Das Schloss am Meer; CHAMISSO, Das Schloss Boncourt; CLAUDIUS, Die Sterne, Der Riese Goliath; GOETHE, Mignon, Erlkönig, Der Sänger; SCHILLER, Der Jüngling am Bache.

LEANDER, Träumereien (selected by Van Daell), pp. 1–44.

Two papers will be set: (1) Prescribed texts and translation at sight; questions on Grammar; (2) translation of English into German.

Elementary, Experimental Science (Chemistry).

Properties of Hydrogen, Chlorine, Oxygen, Sulphur, Nitrogen, Carbon and their more important compounds. Nomenclature.

Laws of combination of the elements. The Atomic Theory and Molecular Theory.

One examination paper.

Botany.

The practical study of representatives of the flowering plants of the locality and representatives of the chief subdivisions of cryptogams, such as a fern, a lycopod, a horsetail, a liverwort, a moss, a lichen, a mushroom, and a chara. The drawing and description of parts of plants and classification. Comparison of different organs, morphology of root, stem, leaves, and hair, parts of the flower, reproduction of flowering plants, pollination, fertilisation and the nature of fruit and seeds. At the examination two plants to be selected by the presiding examiner will be submitted, one for classification and one for description. In classification, candidates will be allowed to use their floras (the authorised text-book in Botany).

One examination paper.

Physics (of Optional Group).

ELECTRICITY.—Voltaic cells, common kinds; chemical action in the cell; magnetic effects of the current; chemical effects of the current; voltameter; astatic and tangent galvanometers; simple notions of potential; Ohm's law, with units; best arrangement of cells; electric light, arc and incandescent; magnetism; inclination and declination of compass; current induction; induction coil; dynamo and motor; electric bell; telegraph; telephone; electro-plating. SOUND. — Caused by vibrations; illustration of vibrations, pendulums, rods, strings, membranes, plates, columns of air; propagated by waves; its velocity; determination of velocity; pitch; standard forks, acoustical C = 512, musical A = 870; intervals; harmonic scale; diatonic scale; equally tempered scale; vibration of air in open and closed tubes, with wave-lengths; resonators; nodes and loops; vibration of strings and wires; reflection of sound; manometric flames. LIGHT. — Rectilinear propagation; image through a pin-hole; beam; pencil; photometry; shadow and grease spot photometers; reflection and scattering of light; laws of reflection; images in plain mirrors; multiple images in inclined mirrors; concave and convex mirrors; drawing image's refraction; laws and index of refraction; total reflection; path through a prism; lenses; drawing image produced by a lens; simple microscope; dispersion and colour; spectrum; recomposition of white light.

c. Senior Leaving Standing, Part I.

Note.—In order to obtain Senior Leaving Standing, a candidate must pass the examination of Part I. of Junior Leaving Standing, and in addition the subjects herein prescribed for Parts I. and II. of Senior Leaving Standing, which may be taken at one examination or at different examinations.

Unsuccessful candidates at any previous Senior Leaving Examination will be allowed to write in 1900 for Senior Leaving Standing by selecting the same options in the course as they were allowed to take in 1899.

The subjects of Part I. of Senior Leaving Standing are the following:—English Composition, English Literature, Algebra, Geometry, Trigonometry, English and Ancient History.

English.

COMPOSITION: An essay, to which special importance will be attached, on one of several themes set by the examiner.

One examination paper.

LITERATURE: The candidate will be expected to have memorised some of the finest passages. Besides questions to test the candidate's familiarity with, and comprehension of, the following selections, questions may also be set to determine within reasonable limits his power of appreciating literary art.

RHETORIC: Reading of prose authors in connection with the study of rhetoric.

One examination paper.

1900.

LONGFELLOW: Evangeline, A Psalm of Life, Wreck of the Hesperus, "The day is done," The Old Clock on the Stairs, The fire of driftwood, Resignation, The Warden of the Cinque Ports, Excelsior, The Bridge, A Gleam of Sunshine.

SHAKESPEARE: Macbeth.

MILTON: L'Allegro, Il Penseroso, Lycidas, On the Morning of Christ's Nativity.

WORDSWORTH: (Palgrave's Golden Treasury of Songs and Lyrics) The Education of Nature ("Three years she grew"), "She was a Phantom of Delight," A Lesson ("There is a flower, the Lesser Celandine"), To the Skylark, The Green Linnet, To the Cuckoo, To the Daisy, and the following Sonnets: To a Distant Friend ("Why art thou silent"), England and Switzerland ("Two voices are there"), "Milton, thou shouldst be living till this hour," Westminster Bridge, The Inner Vision ("Most sweet it is with unuplifted eyes"), "O Friend! I know not which way I must look," To Sleep, Within King's College Chapel.

1901.

TENNYSON: Elaine, Lady of Shalott, St. Agnes' Eve, Sir Galahad, Lotos-Eaters, Ulysses, Crossing the Bar, Early Spring, You ask me why," "Of old sat Freedom," "Love thou thy land," the six interlude songs and "Tears, idle tears," in "The Princess."

MILTON: Paradise Lost, Book VII.

SHAKESPEARE: Julius Cæsar.

1902.

SCOTT: Lay of the Last Minstrel.
MILTON: Paradise Lost, Book I.
SHAKESPEARE: The Merchant of Venice.

Mathematics.

ALGEBRA: Elementary Rules; Highest Common Measure; Lowest Common Multiple; Fractions; Square Root; Simple Equations of one, two, and three unknown quantities; Indices; Surds; Quadratics of one and two unknown quantities; Theory of Divisors, Ratio, Proportion, and Variation; Progressions; Notation; Permutations and Combinations; Binomial Theorem; Interest Forms; Annuities.

One examination paper.

GEOMETRY: Euclid, Books I., II., III., IV., and V.; Definitions of Book V.; Deductions.

One examination paper.

TRIGONOMETRY: Trigonometrical ratios with their relations to each other; Sines, etc., of the sum and difference of angles with deduced formulas; Use of Logarithms; Solution of Triangles; Expressions for the area of Triangles; Radii of circumscribed, inscribed, and exscribed circles.

One examination paper.

History.

English History from the discovery of America to 1763.

General outlines of Greek History to the battle of Chæronea, 338 B.C. Special attention to be paid to the following: General characteristics of Greece and the Greeks; ancient institutions; constitution of Athens and Sparta; Persian wars; growth of the Athenian Empire; characteristics of the age of Pericles; Peloponnesian wars; rise of Thebes; Theban Supremacy; rise of Macedon; downfall of Greece.

General outlines of Roman History to the death of Augustus. Special attention to be given to the following: General characteristics of Italy and the Roman People; struggle of the Plebeians for political and social equality; conquest of Italy; Punic wars; how Rome governed and was governed; internal and external history of Rome from the downfall of Carthage to the death of Augustus.

The Geography relating to the History prescribed.

One examination paper.

d. Senior Leaving Standing, Part II.

Note.—The subjects of Part II. of Senior Leaving Standing are the following:—Physics, Latin, and one of the following groups: (a) French and Greek, (b) German and Greek, (c) French and German, (d) French and Chemistry, (e) German and Chemistry (f) Biology and Chemistry.

Physics.

MECHANICS: Measurement of velocity; uniformly accelerated rectilineal motion; metric units of force, work, energy and power; equilibrium of forces acting at a point; triangle, parallelogram, and polygon of forces; parallel forces; principle of moments; centre of gravity; laws of friction; numerical examples.

HYDROSTATICS: Fluid pressure at a point; pressure on a horizontal plane; pressure on an inclined plane; resultant vertical pressure, and resultant horizontal pressure, when fluid is under air pressure and when not; transmission of pressure; Bramah's press; equilibrium of liquids of unequal density in a bent tube; the barometer; air-pump; water-pump, common and force; siphon.

ELECTRICITY: Voltaic cells, common kinds; chemical action in the cell; magnetic effects of the current; chemical effects of the current; volta-meters; electro-plating; astatic and tangent galvanometers; simple notions of potential; Ohm's law; shunts; measurement of resistance; electric light, arc and incandescent; current induction; induction coil; dynamo and motor; the joule and watt; electric bell; telegraph; telephone; elements of terrestrial magnetism.

One examination paper.

Latin.

Translation into English of passages from prescribed texts.

Translation at sight of passages of average difficulty, similar in style to the authors read.

Grammatical questions on the passages from prescribed texts will be set, and such other questions as arise naturally from the context.

Translation into Latin of easy passages of English, similar in style to the authors read.

The following are the prescribed texts:—

1900: CAESAR, Bellum Gallicum, Bk. V.; VERGIL, Aeneid, Bk. II.; HORACE, Odes, III., IV.; LIVY XXI.

1901: CAESAR, Bellum Gallicum, Bks. II., III.; VERGIL, Aeneid, Bk. II.; HORACE, Odes, I., II.; LIVY XXI.

1902: CAESAR, Bellum Gallicum, Bk. IV., omitting Chap. 17, and Bk. V., Chaps. 1–23; VERGIL, Aeneid II., lines 1–505; HORACE, Odes I., II.; CICERO, Pro Lege Manilia, Pro Marcello, Philippic XIV.

Two examination papers.

French.

The prescription of work in grammar, the translation of English into French and sight translation is the same for Senior Leaving Standing as for Junior Leaving Standing, but the examination will be of a more advanced character.

The following are the prescribed texts:—

1900: ENAULT: Le Chien du capitaine; FEUILLET, La Fée, Le

Roman d'un jeune Homme pauvre; LABICHE, Voyage de M. Perrichon.

1901: DE MAISTRE, Voyage autour de ma chambre; LABICHE, La Grammaire; ERCKMANN-CHATRIAN, Madame Thérèse; LABICHE, Le Poudre aux yeux.

1902: LAMENNAIS, Paroles d'un croyant, Chaps. VII. and XVII.; PERRAULT, Le Maître Chat ou le Chat Botté; DUMAS, Un nez gelé and La Pipe de Jean Bart; ALPHONSE DAUDET, La Dernière Classe and La Chèvre de M. Seguin; LEGOUVÉ, La Patte de Dindon; POUVILLON, Hortibus; LOTI, Chagrin d'un vieux forcat; MOLIÈRE, L'Avare, Acte III., sc. 5 (Est-ce à votre cocher . . . . . sous la mienne); VICTOR HUGO, Waterloo, Chap. IX.; ROUGET DE L'ISLE, la Marseillaise; ARNAULT, La Feuille; CHATEAUBRIAND, L'Exilé; THÉOPHILE GAUTIER, La Chimère; VICTOR HUGO, Extase; LAMARTINE, L'Automne; DE MUSSET, Tristesse; SULLY PRUDHOMME, Le Vase brisé; LA FONTAINE, Le Chêne et le Roseau.

MADAME EMILE DE GIRARDIN, La Joie fait peur.

MÉRIMÉE, Colomba.

Two examination papers.

Greek.

Translation into English of passages from prescribed texts.

Translation at sight of passages of average difficulty, similar to the authors read.

Grammatical questions on the passages from prescribed texts will be set, and such other questions as arise naturally from the context.

Translation into Greek of ordinary narrative passages of English, similar to the authors read.

The following are the prescribed texts:—

1900: XENOPHON, Anabasis, I. (Chaps. I.–VIII.); HOMER, Iliad, I., Odyssey XV.; LYSIAS, Contra Eratosthenem, and Epitaphius.

1901: XENOPHON, Anabasis I. (Chaps. I.-VIII.); HOMER, Iliad I., Odyssey XV.; LUCIAN, Charon, Vera Historia II.

1892: XENOPHON, Anabasis I. (Chaps. I.-VIII.); HOMER, Iliad VI.; Odyssey XVII.: LUCIAN, Charon, Vera Historia II.

Two examination papers.

German.

The prescription of work in grammar, the translation of English into German and sight translation is the same for Senior Leaving Standing as for Junior Leaving Standing, but the examination will be of a more advanced character.

The following are the prescribed texts:—

1900: HAUFF, Das kalte Herz, Kalif Storch; EICHENDORFF, Aus dem Leben eines Taugenichts; WILHELMI, Einer muss heiraten; BENEDIX, Eigensinn.

1901: LEANDER, Träumereien (selected by Van Daell);

BAUMBACH, Der Schwiegersohn; GERSTÄCKER, Germelshausen; ELZ, Er ist nicht eifersüchtig; WICHERT, Post Festum.

1902: GRIMM, Rotkäppchen; ANDERSEN, Wie's der Alte Macht, Das neue Kleid, Venedig, Rothschild, Der Bär; ERTL, Himmelsschlüssel; FROMMEL, Das eiserne Kreuz; BAUMBACH, Nicotiana, Der Goldbaum; HEINE, Lorelei, "Du bist wie eine Blume"; UHLAND, Schäfer's Sonntagslied, Das Schloss am Meer; CHAMISSO, Das Schloss Boncourt; CLAUDIUS, Die Sterne, Der Riese Goliath; GOETHE, Mignon, Erlkönig, Der Sänger; SCHILLER, Der Jüngling am Bache.

LEANDER, Träumereien (selected by Van Daell), pp. 1-44.

EBNER-ESCHENBACH, Die Freiherren von Gemperlein; WILHELMI Einer muss heiraten.

BENEDIX, Eigensinn.

Two examination papers.

Chemistry.

Chemical Theory. The study of the following elements, with their most characteristic compounds, in illustration of Mendelejeff's Classification of the Elements: Hydrogen; Sodium, Potassium; Magnesium, Zinc; Calcium, Strontium, Barium; Boron, Aluminium; Carbon, Silicon, Tin, Lead; Nitrogen, Phosphorus, Arsenic, Antimony, Bismuth; Oxygen, Sulphur; Fluorine, Chlorine, Bromine, Iodine; Manganese, Iron. Elementary Qualitative Analysis.

A practical examination shall be held in connection with the subject, a pure salt will be sent out for qualitative analysis, and the candidate shall be allowed the use of an analytical table. One examination paper.

Biology.

1. *Elements of Zoology:* Thorough examination of the external form, the gills, and the viscera of some common fish. Study of the prepared skeleton of the same. Demonstration of the arrangement of the muscular and nervous systems and the sense-organs, as far as these can be studied without the aid of the microscope.

Comparison of the structure of the frog with that of the fish. The skeleton of the pectoral and pelvic girdles and of the appendages of the frog should be studied, and the chief facts in the development of its spawn till the adult form is attained should be observed.

Examination of the external form of a turtle and a snake.

Examination of the structure of a bird.

Study of the skeleton and also of the teeth of a cat or dog.

Study of the crayfish as a type of the Arthropods.

Comparison of the crayfish with an insect (grasshopper, cricket, or cockroach); also with a millipede and a spider.

Examination of an earthworm.

Study of a fresh-water mussel.

The principles of zoological nomenclature as illustrated by some of the common fresh-water fish, such as the sucker and the herring, bass and perch.

Study of an amœba, or paramœcium as a type of a unicellular animal.

The modifications of the form of the body in vertebrates in connection with different methods of locomotion. The natural habits of the various animals examined.

2. *Elements of Botany:* The examination will test whether the candidate has practically studied representatives of the flowering plants of the locality in which the preparatory school is situated, and representatives of the chief subdivisions of cryptogams, such as a fern, a lycopod, a horsetail, a liverwort, a moss, a lichen, a mushroom, and a chara.

An elementary knowledge of the microscopic structure of the bean and the maize. Attention will be given in the examination to drawing and description of parts of plants supplied, and to their classification. Comparison of different organs, morphology of root, stem, leaves and hair, parts of the flower, reproduction of flowering plants, pollination, fertilisation, and the nature of fruit and seeds.

A practical examination shall be held in connection with this subject. The material for examination will consist of two plants, a microscopic section and an animal.

Two examination papers.

e. Question Papers.

The papers in Part I. for Junior Leaving Standing will be different from those set for Matriculation. The Examiners will be expected, moreover, to set papers for the purposes of candidates who desire to become teachers, but it is not intended that the questions shall be more difficult than the Regulations have called for since 1896. The papers in Arithmetic and Mensuration and Grammar and Rhetoric, as hereinbefore mentioned, shall be submitted to candidates, when writing on Part II. of the Junior Leaving Course, in addition to the papers in these subjects taken by candidates when writing on Part I. For the optional groups, the examinations will be equal in difficulty, as near as may be, in order that candidates who begin the optional subjects at the same time during their High School course may have equal advantages in preparing for the examinations.

f. Percentages.

Each question paper will hereafter be valued at 100 (Regulation 43). Candidates for Junior and Senior Leaving Standing will be required to make 50 per cent. of the aggregate marks prescribed for each of the parts into which the examinations are divided, as well as 33⅓ per cent. on each paper. Seventy-five per cent. of the aggregate will be required for Honours. If, after all the answer papers are read, any question paper should be

found, by the Board of Examiners, easier or more difficult than intended, the minimum on the paper shall be correspondingly raised or lowered, and the total number of marks correspondingly raised or diminished. Each candidate who makes the required aggregate may be awarded a certificate, even though he should fail to obtain the minimum in a subject, provided he was regarded as fit to pass in that subject by the staff, as shown from the confidential report sent to the Department before the examinations.

g. Commercial Diploma.

The course for a Commercial Diploma will, as heretofore consist of two parts (I. and II.). Part I. will be the same as Part I. of Junior Leaving. Part II. will embrace the Commercial subjects mentioned in Regulation 50, viz.:—Book-keeping and Writing; Commercial Transactions; Business forms and usages; Stenography (Theory); Stenography (Dictation). Book-keeping shall be taken up in six sets as follows:—

Set I. shall show transactions extending over a period of two months; the transactions of the first month being done by Single Entry, and of the second by Double Entry, and showing the change from Single to Double Entry. Books to be used: Day Book (1st month), Journal Day Book (2nd month), Cash Book, Bill Book and Ledger.

Set II. The transactions shall be the same as for Set I., those of the first month being done by Double Entry, and of the second month by Single Entry, and showing the change from Double Entry to Single Entry. Books to be used: Four Column Journal with special columns for Mdse. Purchases and Sales (1st month), Day Book (2nd month), Cash Book, Bill Book and Ledger.

Set III. A Double Entry set with two partners. Books to be used: Journal Day Book with a special column for Mdse. Sales, Cash Book, Invoice Book, Bill Book, and Ledger, the first three as books of original entry.

Set IV. A Double Entry set; a continuation of Set III., the posting being done in the same ledger. A third partner shall be admitted and the transactions shall include shipments and consignments. Books to be used: Journal Day Book, Cash Book, Invoice Book, Sales Book, Bill Book, and Ledger, the first four as books of original entry.

Set V. A Double Entry set: a continuation of Set IV., the posting being done in a new ledger. A fourth partner shall be admitted, and the transactions shall include wholesale merchandising, shipment companies, and merchandise companies. Books to be used: The same as for Set IV.

Set VI. A set in Manufacturing. Books to be used: Journal Day Book, with a special column for Mdse. Sales, Cash Book, Time Book, and Ledger.

The Cash Book shall be a book of original entry in all of the Double Entry sets, various special columns being used in the different sets. A monthly Trial Balance shall be used in connection with Sets III., IV., and V., and Statements of Resources and Liabilities, and of Losses and Gains for all of the sets. The transactions in the different sets shall be different from year to year. The sets may recur triennially, and shall consist of not less than twenty pages of foolscap.

The book-keeping sets of pupils who write at the examination for a Commercial Diploma shall be examined by the teacher and a report sent to the Education Department.

Business Forms and Usages.—Negotiable paper; promissory notes; special notes; bills of exchange; acceptance; negotiation of bills, notes; cheques; collection of accounts; discharge and dishonour; special forms of due bills and orders; accounts, invoices and statements; interest; partnerships; receipts and releases; banking; and commercial correspondence.

Stenography.—At the examination in dictation in stenography, the candidate shall be required to have attained the rate of fifty words per minute. He shall also be required to transcribe his work into longhand at the rate of twelve words per minute. The dictated matter shall consist of business letters and legal documents.

Four examination papers, each valued at 100.

PART III.—STATISTICAL TABLES FOR THE YEAR 1898.

The following statistical tables are taken from the Report of the Minister of Education for 1899:—

TABLE 1.—PUBLIC SCHOOLS.

	Number of pupils in the different branches of instruction, 1898.																					
	Reading.																					
	1st Reader Part I.	1st Reader Part II.	2nd Reader.	3rd Reader.	4th Reader.	5th Reader.	Writing.	Arithmetic	Drawing.	Geography.	Music.	Grammar and Composition.	English History.	Canadian History.	Physiology and Temperance.	Drill and Calisthenics.	Book-keeping.	Algebra.	Geometry.	Botany.	Elementary Physics.	Agriculture.
1. Counties, etc. -	69,248	46,728	57,830	61,586	57,031	14,879	294,762	298,966	282,953	210,034	120,149	191,342	81,013	110,657	123,086	128,793	15,994	13,758	13,418	1,225	2,205	1,204
2. Cities - - -	14,455	9,000	13,068	15,369	13,066	2,999	67,253	67,955	67,952	58,767	60,727	54,321	13,119	21,453	47,225	65,331	5,026	2,841	2,841	3,139	779	—
3. Towns - - -	14,862	9,435	11,809	12,405	11,656	1,301	60,972	61,286	59,563	45,380	39,172	43,836	14,433	23,013	31,501	37,849	2,109	1,386	1,308	122	432	40
4. Grand Total, 1898	98,565	65,163	82,707	89,360	81,753	19,179	422,987	428,207	410,468	314,181	220,048	289,499	108,565	155,123	201,812	231,973	23,129	17,985	17,567	4,486	3,416	1,244
5. Grand Total, 1897	100,075	65,482	83,423	90,942	81,823	19,412	425,801	431,704	411,982	314,718	208,078	290,716	107,570	156,493	197,216	241,482	23,668	17,984	17,166	5,161	4,100	2,189
6. Increase - -	—	—	—	—	—	—	—	—	—	—	11,970	—	995	—	4,596	—	—	1	401	—	—	—
7. Decrease - -	1,510	319	716	1,582	70	233	2,814	3,497	1,514	537	—	1,217	—	1,370	—	9,509	539	—	—	675	684	945
8. Percentage - -	23	15	19	20	19	4	97	98	94	72	51	66	25	36	46	53	5	4	4	1	1	½

Part III.—Statistical Tables for the year 1898—continued.

TABLE 2.—PUBLIC SCHOOLS.

	School population.—Pupils attending the Public Schools, 1898.																
	School population between 5 and 21 years of age.	Pupils under 5 years of age.	Pupils between 5 and 21 years of age.	Pupils over 21 years of age.	Total number of pupils of all ages attending school.	Boys.	Girls.	Attending less than 20 days during the year.	20 to 50 days.	51 to 100 days.	101 to 150 days.	151 to 200 days.	201 days to the whole year.	No. of children 8 to 14 (inc.) who did not attend any school during the year.	No. of children 8 to 14 (inc.) who did not attend any school for 100 days during the year.	Average attendance of pupils.	Percentage of average to total attendance.
1. Counties, etc. - -	382,628	1,274	305,846	182	307,302	161,518	145,784	27,191	44,353	65,689	72,122	87,423	10,524	2,238	57,875	157,195	52
2. Cities - - -	121,915	2	67,952	3	67,957	34,611	33,346	1,998	4,453	10,281	11,978	39,237	10	42	3,301	50,280	74
3. Towns - - -	86,757	21	61,429	18	61,468	31,232	30,236	2,675	4,972	10,409	13,112	30,149	151	285	5,894	40,305	66
4. Grand total, 1898 -	591,300	1,297	435,227	203	436,727	227,361	209,366	31,864	53,778	86,379	97,212	156,809	10,685	2,565	67,070	247,780	57
5. Grand total, 1897 -	590,055	1,269	439,642	246	441,157	230,335	210,822	32,446	54,725	90,147	97,824	157,835	8,180	2,243	68,791	248,548	56
6. Increase - - -	1,245	28	–	–	–	–	–	–	–	–	–	–	2,505	322	–	–	1
7. Decrease - - -	–	–	4,415	43	4,430	2,974	1,456	582	947	3,768	612	1,026	–	–	1,721	768	–
8. Percentage - -	–	·30	99·65	·5	–	5	48	7	12	20	22	37	2	–	–	–	–

TABLE 3.—PUBLIC SCHOOLS

	Public School Teachers, 1898.														
	Total number.			Average Salaries.			Attended a Normal School.	Certificates.							
	Public School teachers.	Male.	Female	Highest Salary Paid.	Average Salary, male teacher.	Average Salary, female teacher.	Number of teachers who have attended a Normal School.	Total number of certificates.	Provincial 1st class.	Provincial 2nd class.	1st class old County Board	2nd class old County Board.	3rd class.	Temporary certificates.	Other certificates.
				$	$	$									
1. Counties, etc. -	6,082	2,322	3,760	800	346	250	1,751	6,082	163	1,763	17	13	4,080	46	—
2. Cities - - -	1,372	150	1,222	1,500	888	448	1,105	1,372	171	948	14	7	61	—	171
3. Towns - - -	1,011	184	827	1,150	626	291	729	1,011	98	699	13	4	192	5	—
4. Grand Total 1898	8,465	2,656	5,809	1,500	396	293	3,585	8,465	432	3,410	44	24	4,333	51	171
5. „ 1897	8,376	2,690	5,686	1,500	391	294	3,479	8,376	337	3,336	53	32	4,345	55	218
6. Increase - -	89	—	123	—	5	—	106	89	95	74	—	—	—	—	—
7. Decrease - -	—	34	—	—	—	1	—	—	—	—	9	8	12	4	47
8. Percentage - -	—	31	69	—	—	—	43	—	4	41	½	⅓	52	½	2

Part III.—Statistical Tables for the year 1898—continued.

TABLE 4.—PUBLIC SCHOOLS.

	RECEIPTS AND EXPENDITURE.									
	Legislative Grants.	Municipal Grants and Assessments.	Clergy Reserve Fund, Balances and other Sources.	Total Receipts for all Public School Purposes.	Teachers' Salaries.	Sites and Building School Houses.	Maps, Apparatus, Prizes, and Libraries.	Rent and Repairs, Fuel and other Expenses.	Total Expenditure for all Public School Purposes.	Balances.
	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
1. Counties, etc. - -	245,268 78	1,889,762 01	931,573 42	3,066,604 21	1,723,387 24	183,770 12	40,276 35	416,300 74	2,363,734 45	702,869 76
2. Cities - - - -	53,191 00	958,259 82	158,022 46	1,169,473 28	646,534 11	204,738 28	12,671 10	265,175 17	1,129,118 66	40,354 62
3. Towns - - - -	42,011 00	457,359 91	94,811 36	594,182 27	377,238 63	37,913 57	4,752 33	130,476 25	550,380 78	43,801 49
4. Grand Total, 1898 -	340,470 78	3,305,381 74	1,184,407 24	4,830,259 76	2,747,159 98	426,421 97	57,699 78	811,952 16	4,043,233 89	787,025 87
5. Grand Total, 1897 -	339,863 30	3,136,943 99	1,176,023 72	4,652,831 01	2,717,261 09	350,456 70	54,798 27	790,985 42	3,913,501 48	739,329 53
6. Increase - - -	607 48	168,437 75	8,383 52	177,428 75	29,898 89	75,965 27	2,901 51	20,966 74	129,732 41	47,696 34
7. Decrease - - -	—	—	—	—	—	—	—	—	—	—
8. Percentage - - -	7	68	25	—	68	11	1	20	—	—
Cost per Pupil.										
1. Counties, etc. - -	7 69	—	—	—	—	—	—	—	—	—
2. Cities - - - -	16 61	—	—	—	—	—	—	—	—	—
3. Towns - - - -	8 95	—	—	—	—	—	—	—	—	—
4. Province - - -	9 26	—	—	—	—	—	—	—	—	—

TABLE 5.—HIGH SCHOOLS, 1898.

a. RECEIPTS AND EXPENDITURE.

	Legislative grants.	Municipal grants (county).	Municipal grants (local).	Fees.	Balances and other sources.	Total receipts.	Teachers' salaries.	Building, rent and repairs.	Maps, apparatus, prizes and libraries.	Fuel, books and contingencies.	Total expenditure.	Balances.	Charges per year.
1. Total, 1898	$58,279 41	87,660 35	116,870 28	37,897 86	60,259 03	360,966 93	242,654 93	22,644 17	3,519 52	59,932 06	328,750 68	32,216 25	42 free. 51 fee.
2. „ 1897	$56,652 84	89,209 75	117,167 04	40,287 04	69,479 79	372,796 46	244,067 00	28,249 41	5,703 65	61,124 45	339,144 51	33,651 95	33 free. 60 fee
3. Increase	$1,626 57	—	—	—	—	—	—	—	—	—	—	—	9 free.
4. Decrease	—	$1,549 40	296 76	2,389 18	9,220 76	11,829 53	1,412 07	5,605 24	2,184 13	1,192 39	10,393 83	1,435 70	9 fee.
5. Percentage	17	24	32	10	17	—	73	7	1	19	—	—	—

Cost per pupil, $28.56.

b. MISCELLANEOUS INFORMATION.

	Brick, stone or frame school house.	Size of playground.	Schools under United Board.	Value of library.	Value of scientific apparatus.	Value of charts, maps and globes.	Gymnasium.	Value of gymnasium and appliances.	Museum.	Estimated value of museum.	Schools using authorised Scripture readings.	Schools opened and closed with prayer.	Schools using Bible.	Religious instruction imparted.	Commencement exercises.	No. of pupils in— Form I.	Form II.	Form III.	Form IV.	No. of pupils from municipalities composing the High School district.	From other municipalities within the county.	From other counties.	Who entered mercantile life.	Who became occupied with agriculture.	Who joined a learned profession.	Who became teachers.	Who left for other occupations.	Occupation of parents. Commercial.	Agricultural.	Mechanical.	Professional.
	B S F																													
1. Total, 1898	80 9 3	186	39	26,976	35,826	5,718	7	5,076	16	680	37	91	29	2	60	4,468	3,889	2,810	523	6,619	4,241	830	666	654	237	762	1,003	2,520	5,363	2,853	954
2. „ 1897	82 9 2	185	39	26,612	34,278	5,545	10	6,731	15	795	40	90	31	3	66	4,853	3,974	2,856	499	6,635	4,686	861	589	650	165	1,070	893	2,542	5,655	2,969	1,016
3. Increase	1	1	–	364	1,548	173	–	–	1	–	–	1	–	–	–	–	–	–	24	–	–	–	77	4	72	–	110	–	–	–	–
4. Decrease	2	–	–	–	–	–	3	655	–	115	3	–	2	1	6	385	85	46	–	16	445	31	–	–	–	308	–	22	292	116	62
5. Percentage	87 10 3	–	42	–	–	–	8	–	18	–	40	99	32	–	65	38	33	24	5	57	36	7	–	–	–	–	–	21	46	24	9

Part III.—Statistical Tables for the year 1898—continued.

TABLE 6.—COLLEGIATE INSTITUTES, 1898.

a. RECEIPTS AND EXPENDITURE.

	Legislative grants.	Municipal grants (Country).	Municipal grants (local).	Fees.	Balances and other sources.	Total receipts.	Teachers' salaries.	Building, rent and repairs.	Maps, apparatus, prizes and libraries.	Fuel, books and contingencies.	Total expenditure.	Balances.	Charges per year.
1. Total, 1898	$41,923 59	45,596 86	215,210 77	66,587 81	49,164 60	418,483 63	289,231 94	29,621 85	3,829 01	77,575 53	400,258 33	18,225 30	9 Free. 28 Fee.
2. „ 1897	$44,597 16	43,518 83	201,519 03	70,572 35	34,483 24	394,690 61	288,769 73	18,377 53	3,870 82	65,813 81	376,831 89	17,858 72	10 Free. 27 Fee.
3. Increase	—	$2,078 03	13,691 74	—	14,681 36	23,793 02	462 21	11,244 32	—	11,761 72	23,426 44	366 58	1 Fee.
4. Decrease	$2,673 57	—	—	3,984 54	—	—	—	—	41 81	—	—	—	1 Free.
5. Percentage	10	11	51	16	12	—	72	7	1	20	—	—	—

Cost per pupil, $34.54.

b. MISCELLANEOUS INFORMATION.

	Brick, stone or frame school house.	Size of playground.	Schools under United Board.	Value of library.	Value of scientific apparatus.	Value of charts, maps, and globes.	Gymnasium.	Value of gymnasium and appliances.	Museum.	Estimated value of museum.	Schools using authorised Scripture readings.	Schools opened and closed with prayer.	Schools using Bible.	Religious instruction imparted.	Commencement exercises.	No. of pupils in— Form I.	Form II.	Form III.	Form IV.	No. of pupils from municipalities composing the High School district.	From other municipalities within the county.	From other counties.	Who entered mercantile life.	Who became occupied with agriculture.	Who joined a learned profession.	Who became teachers.	Who left for other occupations.	Occupation of parents. Commercial.	Agricultural.	Mechanical.	Professional.
	B. S.	acrs																													
1. Total, 1898	33 4	86	15	29,696	36,170	5,193	34	55,356	19	2,452	23	36	12	–	30	4,899	3,212	2,490	1,010	8,270	2,862	479	825	396	262	674	992	3,814	3,351	3,013	1,433
2. „ 1897	33 4	89½	15	28,406	35,736	5,080	34	55,573	15	1,683	22	36	11	1	31	5,283	3,288	2,507	1,130	8,552	3,062	594	779	483	244	986	1,065	4,126	3,236	3,352	1,494
3. Increase	–	–	–	1,290	434	113	–	–	4	769	1	–	1	–	–	–	–	–	–	–	–	–	46	–	18	–	–	–	115	–	–
4. Decrease	–	3½	–	–	–	–	–	217	–	–	–	–	–	–	1	384	76	17	120	282	200	115	–	87	–	312	73	312	–	339	61
5. Percentage	89 11	–	41	–	–	–	89	–	51	–	62	100	33	–	82	42	28	21	9	71	25	4	–	–	–	–	–	33	29	25	13

TABLE 7.—COLLEGIATE INSTITUTES, 1898.

	Number of pupils in the different branches of Instruction.													Examinations, etc.										
	Zoology.	Latin.	Greek.	French.	German.	Writing.	Book-keeping and Commercial Transactions.	Stenography.	Drawing.	Vocal Music.	Drill.	Calisthenics.	Gymnastics.	How many pupils obtained Commercial Diplomas in 1898.	No. passed Primary Examination.	No. passed Junior Leaving Examination.	No. passed Senior Leaving Examination.	No. passed Departmental Matriculation Examination.	No. passed the Junior Matriculation Examination at any University.	No. passed the Senior Matriculation Examination at any University.	No. 1st Class Matriculation Honours.	No. 2nd Class Matriculation Honours.	No. passed Matriculation Examination, Law Society, 1898.	No. passed Matriculation Examination, Medical Council, 1898.	No. passed the Preliminary Examination for a Student in Surveying, 1898.
1. Total, 1898	229	9,395	835	7,332	3,081	4,284	5,652	1,715	5,528	30	6,863	6,610	5,785	39	469	450	165	340	139	9	123	175	8	43	7
2. „ 1897	361	8,954	871	7,453	2,869	5,204	5,652	1,206	6,144	30	8,313	7,162	5,939	9	560	865	333	270	128	8	151	178	9	35	7
3. Increase	–	441	–	–	212	–	–	509	–	–	–	–	–	30	–	–	–	70	11	1	–	–	–	8	–
4. Decrease	132	–	36	121	–	920	–	–	616	–	1,450	552	154	–	91	415	168	–	–	–	28	3	1	–	–
5. Percentage	2	80	7	63	26	36	48	15	47	½	59	57	49	½	4	4	1½	3	1¼	–	1	1½	–	½	–

TABLE 8.—KINDERGARTENS, 1898.

Note.—The system of Kindergarten instruction, first introduced into Ontario in 1882, and subsequently made part of the School System of the Province, by the Public Schools Act of 1885, has met with encouraging success. A report of the pupils receiving instruction in this way was first made in 1892. The report showed that in the short space of ten years, 69 Kindergartens were established, with 160 teachers, attended by 6,375 children under six years of age.

No. of Kindergartens.	Number of Teachers.	No. of Pupils attending.	Average attendance.
116	240	11,083	4,573.

TABLE 9.—NIGHT SCHOOLS. 1898.

No. of Night Schools.	No. of Teachers.	No. of Pupils attending.*	Average attendance.
18	42	1,504	363

* This number does not include the attendance at the classes established by Mechanics Institutes and Art Schools.

TABLE 10.

A General Statistical Abstract, exhibiting the comparative state and progress of Education in Ontario, as connected with Public, Separate and High Schools (including Collegiate Institutes); also Normal College and Normal and Model Schools. From the year 1867 to 1898, compiled from Returns in the Education Department.

No.	Subjects compared.	1867.	1872.	1877.	1882.	1887.	1892.	1897.	1898.
1	Population	—	1,620,851	—	1,926,922	—	2,114,321	—	—
2	School population between the ages of five and sixteen years, up to 1884 (and five to twenty-one subsequently)	447,726	495,756	494,804	483,817	611,212	595,238	590,055	591,300
3	High Schools (including Collegiate Institutes)	102	104	104	104	112	128	130	130
4	Normal College and Normal and Model Schools	3	3	4	6	6	6	7	7
5	Total Public Schools in operation	4,261	4,490	4,955	5,013	5,277	5,577	5,574	5,587
6	Total Roman Catholic Separate Schools	161	171	185	190	229	312	340	345
7	Grand total of all schools in operation	4,527	4,768	5,248	5,313	5,624	6,023	6,051	6,069
8	Total pupils attending High Schools (including Collegiate Institutes)	5,696	7,968	9,229	12,348	17,459	22,837	24,390	23,301
9	Total students and pupils attending Normal College, Normal and Model Schools	800	800	900	1,059	1,204	1,270	1,492	1,492
10	Total pupils attending Public Schools	382,719	433,256	465,908	445,364	462,839	448,204	441,157	436,727
11	Total pupils attending Roman Catholic Separate Schools	18,924	21,406	24,952	26,148	30,373	37,466	41,620	41,667
12	Grand total, students and pupils attending High, Public, Separate, Normal College and Normal and Model Schools	408,139	463,430	500,989	484,919	511,875	509,777	508,659	503,187
13	Total amount paid for the salaries of Public and Separate School Teachers	1,093,516	1,371,594	2,038,099	2,144,448	2,458,540	2,752,628	2,886,061	2,914,830
14	Total amount paid for the erection and repairs of Public and Separate School Houses, and for libraries and apparatus, books, fuel, stationery, etc.	379,672	835,770	1,035,390	882,526	1,283,565	1,301,289	1,329,609	1,477,885
15	Grand total paid for Public and Separate School Teachers' Salaries, the erection and repairs of the school houses, and for libraries, apparatus, etc.	1,473,188	2,207,364	3,073,489	3,026,974	3,742,105	4,053,917	4,215,670	4,392,715
16	Total amount paid for High School (including Collegiate Institutes), Teachers' salaries	94,820	141,812	211,607	253,864	327,452	470,828	532,837	531,887
17	Total amount paid for erection and repair of High School (including Collegiate Institutes) houses, maps, apparatus, prizes, fuel, books, etc.	12,190	31,360	51,417	89,857	168,160	215,871	183,139	202,957
18	Amount paid for other educational purposes*	332,825	489,690	250,968	262,307	280,832	353,987	346,820	342,916
19	Grand total paid for educational purposes	1,920,023	2,820,226	3,587,481	3,633,002	4,518,549	5,094,603	5,278,466	5,470,475
20	Total Public and Separate School Teachers	4,890	5,476	6,468	6,857	7,594	8,480	9,128	9,209
21	Total male teachers	2,849	2,626	3,020	3,062	2,718	2,770	2,784	2,743
22	Total female teachers	2,041	2,850	3,448	3,795	4,876	5,710	6,344	6,466

* Colleges and Private Schools are included for 1867 and 1872.

TABLE 11.

SUMMARY OF STATISTICS FOR 1898.

a. ELEMENTARY SCHOOLS.[1]

Number of Public Schools		5,587
Increase for the year	13	
Number of Roman Catholic Separate Schools		345
Increase for the year	5	
Number of Protestant Separate Schools		8
Number of Kindergartens		116
Number of teachers		240
Number of Night Schools		18
Number of teachers		42
Amount expended for Public School Houses (sites and buildings)		$426,422
Amounts expended for Public School teachers' salaries)		$2,747,159
Amount expended for all other purposes		$869,652
Total amount expended on Public Schools		$4,043,233
Increase	$129,732	
Number of persons in the Province between the ages of 5 and 21		591,300
Increase for the year	1,245	
Number of registered pupils of all ages in the Public Schools during the year		436,727
Decrease for the year	4,430	
Average attendance of pupils in the Public Schools during the year		247,780
Decrease for the year	768	
Number of pupils in Roman Catholic Separate Schools		41,667
Increase for the year	47	
Average attendance of pupils in Roman Catholic Separate Schools		25,671
Increase for the year	675	
Number of pupils in Protestant Separate Schools		505
Decrease for the year	38	
Average attendance of pupils in Protestant Separate Schools		266
Decrease for the year	55	

[1] The Curriculum of Elementary Schools embraces the following subjects: Reading, Writing, Arithmetic, Composition, Drawing, English Literature, Geography, Music, Grammar, History, Physiology and Temperance, Drill and Calisthenics, Book-keeping, Algebra, Geometry, Botany, Elementary Physics, Agriculture.

a. ELEMENTARY SCHOOLS—*cont.*

Number of pupils attending Kindergartens - -		11,083
Increase for the year - - -	390	
Average attendance of pupils at Kindergartens -		4,573
Increase for the year - - -	211	
Number of pupils attending Night Schools		1,504
Increase for the year - - -	98	
Average attendance of pupils at Night Schools -		363
Increase for the year - - -	46	
Percentage of average attendance to total attendance in Public Schools - - - - -		57
Number of persons employed as teachers in the Public Schools during the year: Men, 2,656; women, 5,809; total - - - - -		8,465
Decrease: men, 34;		
Increase: women, 123; increase - -	89	
Number of teachers who have attended a Normal School - - - - - - - -		3,585
Increase for the year - - -	106	
Number of teachers who have attended a County Model School in 1899 - - - -		1,271
Average annual salary of male teachers in Public Schools - - - - - - - -		$396
Increase for the year - - -	$5	
Average annual salary of female teachers in Public Schools - - - - - - - -		$293
Decrease for the year - - -	$1	

b. SECONDARY SCHOOLS.[1]

Number of High Schools (including 37 Collegiate Institutes) - - - - - - -		130
Number of teachers in High Schools - - -		571
Decrease for the year - - -	8	
Number of pupils in High Schools - - -		23,301
Decrease for the year - - -	1,089	
Amount expended for High School teachers' salaries - - - - - - - -		$531,887
Amount expended for High School houses (sites and buildings) - - - - - - -		$52,266
Amount expended for all other High School purposes - - - - - - -		$144,856
Total amount expended on High Schools		$729,009

[1] The Curriculum of Secondary Schools includes all the subjects required for Matriculation at the University (see below, Appendix G).

APPENDIX A.

REGULATIONS OF THE EDUCATION DEPARTMENT OF THE PROVINCE OF ONTARIO.

(Approved by the Education Department, October 20th, 1896.)

Public Schools.

Sites and School Houses.

1. The site of every public school shall admit of easy drainage and shall be accessible by the best highways in the section. Its area shall be not less than half an acre, and if the school population of the section exceeds seventy-five, the area shall be not less than one acre. The grounds shall be levelled and drained, enclosed by a neat and substantial fence and planted with shade trees. The school house shall be placed at least 30 feet from the public highway.

2. There shall be a well or other means of procuring water, so placed and guarded as to be secure against pollution from surface drainage, or in any other way. Every rural school shall be provided with a woodshed.

3. The closets for the sexes shall be under different roofs. They shall be separated by a high close-board fence, their entrances screened from observation, and locked after school hours. They shall be properly cleansed and disinfected when necessary, and approached by proper walks from the school house so as to be accessible with comfort at all seasons of the year.

4. Where the average attendance of any section for three years exceeds 50 pupils a school house with two rooms shall be provided. An additional room and teacher shall be required for each additional 50 pupils in average attendance. Every school house shall afford separate entrances with covered porches and suitable cloak rooms for boys and girls.

5. Every schoolroom shall contain a superficial area of at least 12 square feet, and a cubic content of at least 250 feet, for each pupil in average attendance. A uniform temperature throughout the room of at least 67 degrees shall be maintained, and provision made for a complete change of atmosphere three times every hour. The windows, both sashes, shall be adjusted by weights and pulleys and provided with suitable blinds. Light, where possible, shall be admitted from the left of the pupil.

Furniture and Equipment.

6. Every school house shall be seated with either double or single desks, single desks being preferred. The desks shall be fastened to the floor in rows facing the teacher's platform, with suitable aisles between the rows and with passages at least three feet wide between the outside rows and

the walls of the school room. Desks according to the following scale shall be considered as meeting all legal requirements :—

Age of Pupils.	Seats.			Desks.			
	Height.		Slope of Back.	Length.		Width.	Height next Pupil.
	Front.	Rear.		Double.	Single.		
Five to eight years - -	11 in.	10½ in.	2 in.	36 in.	18 in.	12 in.	22 in.
Eight to ten years - -	12 „	11½ „	2 „	36 „	18 „	12 „	23 „
Ten to thirteen years - -	13 „	12½ „	2½ „	36 „	20 „	13 „	24 „
Thirteen to sixteen years -	14 „	14½ „	3 „	40 „	22 „	13 „	26 „

7. There shall be one blackboard, at least four feet wide, extending across the whole room in rear of the teacher's desk, with its lower edge not more than 2½ feet above the floor or platform ; and, when possible, there should be an additional blackboard on each side of the room. At the lower edge of each blackboard there should be a trough five inches wide for holding crayons and brushes.

Note.—The following directions for making a blackboard may be found useful :—

(*a*) Where a brick wall is built solid, and also in cases of frame buildings, the part to be used for a blackboard should be lined with boards, and the laths for holding the plaster nailed firmly on the boards.

(*b*) The plaster for the blackboard should be composed largely of plaster of Paris.

(*c*) Before and after having received the first coat of colour it should be thoroughly polished with fine sand paper.

(*d*) The colouring matter should be laid on with a wide flat varnish brush.

(*e*) The liquid colouring should be made as follows :—Dissolve gum shellac in alcohol, four ounces to the quart ; the alcohol should be ninety-five per cent. strong ; the dissolving process will require at least 12 hours. Fine emery flour, with enough chrome green or lamp black to give colour, should then be added until the mixture has the consistency of thin paint. It may then be applied, in long even strokes, up and down, the liquid being kept constantly stirred.

8. Every school shall have at least one globe not less that nine inches in diameter, properly mounted ; a map of Canada ; a map of Ontario ; a map of the world and of the continents ; one or more sets of tablet lessons of Part I. of the First Reader ; a standard dictionary ; a gazetteer ; a numeral frame ; a suitable supply of crayons and blackboard brushes ; an eight-day clock ; shelving for baskets ; hooks for caps and cloaks ; and two chairs in addition to the teacher's chair.

9. The Trustees shall appoint one of their number or some suitable person to keep the school house and premises and all fences, outhouses, walks, windows, desks, maps, blackboards and stoves in proper repair. They shall also provide for whitewashing walls and ceilings if finished in plaster (or for washing if finished in wood), every year during the summer holidays, and shall employ a caretaker whose duty it shall be to sweep the floors daily, and wash them at least quarterly and to make fires one hour before the opening of school, from the 1st of November to the 1st of May in each year.

10. No public school house or school grounds, unless otherwise provided for in the conveyance to the trustees, shall be used for any other than public school purposes without the consent of the trustees, and no advertisements shall be posted in any school room or distributed to the pupils unless approved in the same way.

11. The first Friday in May each year shall in rural school sections and in incorporated villages be devoted to the planting of shade trees, the making of flower beds, and otherwise beautifying and improving the school grounds. Songs and recitations designed to cultivate greater interest in trees and flowers and in the study of nature shall form part of the exercises of the day.

Duties of Pupils.

12. Every pupil registered in a public school shall attend punctually and regularly every day of the school year in which his name is so registered. He shall be neat and cleanly in his person and habits, diligent in his studies, kind and courteous to his fellow-pupils, obedient and respectful to his teacher, and shall submit to such discipline as would be exercised by a kind, firm and judicious parent.

13. Every pupil on returning to school after absence from any cause shall give orally or in writing to the teacher, a proper reason for his absence. A pupil may retire from school at any hour during the day at the request, either oral or written, of his parent or guardian. A pupil may be suspended who fails or neglects to provide himself with the text books or other supplies required in his course of study, or to pay the fees imposed for such purposes by the trustees.

14. Every pupil shall be responsible to the teacher for his conduct on the school premises or on the way to or from school, except when accompanied by his parents or guardians, or by some person appointed by them on their behalf. Any pupil who injures or destroys school property or furniture may be suspended until the property or furniture destroyed or injured is made good by the parent or guardian of such pupil.

School Terms and Organization.

15. Unless otherwise directed by the Trustees, the pupils attending every public school shall assemble for study at nine o'clock in the forenoon, and shall be dismissed not later than four o'clock in the afternoon. One hour at least shall be allowed for recreation at mid-day, and ten minutes during the forenoon and afternoon terms, but in no case shall the hours of study be less than five hours per day, including the recess in the forenoon and afternoon, provided always the Trustees may reduce the hours of study for pupils in the First and Second Forms.

16. Pupils not registered in a day school may attend a night school from the 1st of October until the 31st of March. The hours of study in the night school shall not exceed 2½ hours per session. Pupils shall not be admitted to a night school who are under 14 years of age or who attend school during the day. Night schools shall be subject to the same regulations as public schools with respect to the discipline of pupils, the duties and qualifications of teachers and the use of text books.

17. The course of study for public schools shall be taken up in five forms as hereinafter set forth, and pupils shall be classified by the teacher with respect to their attainments in all the subjects of the form to which they are assigned or from which they are to be promoted. Pupils who have passed the high school entrance examination and such other pupils as are considered qualified by the teacher and inspector shall be entitled in both rural and urban schools to receive instruction in the subjects of the Fifth Form, provided that, in a municipality having a high school if resident pupils of the First Form are not charged fees it will not be deemed obliga-

tory for the public school board to have a fifth class. The amount of time to be given to any class is to be determined by the teacher, who shall be guided in this matter by the inspector. Subjects of the course of study marked with an asterisk are optional.

18. An optional subject shall be taken only with the consent of the Trustees and the Inspector, and where the teacher is the holder of a first or second class certificate and has passed an examination in the option which he undertakes to teach. The Trustees of any rural school may, by resolution passed at a regular meeting of the board, require agriculture to be taught in the fourth and fifth forms of the school, and in such cases the inspector shall report to the Trustees at least annually, the extent of the course taken by the pupils and their standing. Not more than three periods of 30 minutes each shall be given per week to the study of all the optional subjects. In urban schools such instruction may be given in domestic economy as the Trustees deem exedient.

19. In school sections where the French or German language prevails, the Trustee may, in addition to the course of study prescribed for public schools, require instruction to be given in reading, grammar and composition to such pupils as are directed by their parents or guardians to study either of these languages, and in all such cases the authorised text books in French or Germân shall be used. But nothing herein contained shall be construed to mean that any of the text book prescribed for public schools shall be set aside because of the use of the authorised text books in French or German.

Continuation Classes.

20. In schools where instruction for the primary examinations has been given under former regulations similar to what may be given by the establishment of a continuation class in connection with any public school under the provisions of Section 8 of the Public Schools Act, 1896, the principal of the school shall be deemed qualified so long as he remains principal of such school. In the case of any subsequent appointment as principal, the qualifications shall be a first class certificate for schools in class (*a*) hereinafter mentioned.

21. Any grant made by the Legislature for public school leaving examinations and continuation classes shall be distributed by the Minister of Education among the schools of the three grades hereafter mentioned, viz. : —(*a*) Schools in which the principal holds a first class certificate (unless occupying the position in 1896), and gives regular instruction only to pupils who have passed the high school entrance examination (one or more of whom have also passed the public school leaving examination) and who are taking the full course required for primary standing. (*b*) Schools in which there are two or more teachers and a class in regular attendance of at least 10 pupils who have passed the high school entrance examination (one or more of whom have also passed the public school leaving examination) and who are taking the full work required for primary standing. (*c*) Schools in which there is a class in regular attendance of at least five pupils who have passed the high school entrance examination (one or more of whom have also passed the public school leaving examination) and who are taking the full course prescribed for primary standing. Any person holding a second class certificate shall be deemed qualified to conduct the classes in schools under divisions (*b*) and (*c*). Before a grant is paid to any school for a continuation class the inspector shall certify to its efficiency, and to the competence of the teachers employed to give the instruction required by the regulations of the Education Department. Any school receiving a grant under this regulation shall not receive any additional allowance on account of pupils who may pass the public school leaving examination. (Modified in 1899, *see* § III. of Part II., above.)

Public School Courses of Study.

22. Subject to any instructions issued by the Minister of Education from time to time, the limitations and examination requirements of each Form in the public school shall be as set forth in Schedule A—Public School Courses of Study. (*See* below.)

High School Entrance Examinations.

23. At every high school and collegiate institute and such other places as may be recommended by the county council, examinations to be known as high school entrance examinations, to be conducted on the subjects prescribed for the Fourth Form of public schools, shall be held annually. The county council may impose a fee not exceeding one dollar upon each county pupil writing at the entrance examination. Boards of trustees may impose similar fees upon resident and non-resident pupils writing for the entrance examination at high schools and collegiate institutes.

24. Any person intending to write at this examination shall notify the inspector in whose district he proposes to write on or before the 1st day of May. Where more examinations than one are held in the same inspectoral division, he shall notify the inspector of the place at which he desires to be examined. The answer papers of the candidates shall be read by the Board of Examiners constituted under Section 38 of the High Schools Act, 1896.

25. The answers of candidates at the entrance examination shall be appraised according to the following scale, viz.: In reading, spelling, drawing, writing, 50 each; in physiology and temperance, composition, history, geography, 100 each; in grammar and literature, 150 each; in arithmetic, 200. Two marks shall be deducted for each misspelled word on the dictation paper, and one mark for every misspelled word in any other paper. Reasonable deductions may also be made for want of neatness.

26. Any candidate who obtains one-third of the marks in each subject and one-half of the aggregate marks shall be considered as having passed the examination. The examiners may also award pass standing to candidates who have not made a bad failure in any subject but who have made a high aggregate above the half required, or whose case on account of age or other circumstances demands special consideration. The decision of the Board of Examiners shall be final with regard to the admission or rejection of any candidate, but the inspector may submit to the board for re-consideration the complaint of any candidate or any other person with regard to the examination.

27. In the interval between the annual examinations, pupils may be admitted to a high school by the Minister of Education on the joint report of the principal of a high school and the public school inspector, showing the attainments of such pupil, his age, and the reasons for his non-attendance at the entrance examination prescribed by the Department. No pupil shall be admitted until his case is disposed of by the Minister. The names of such pupils shall be included in the report of the Board of Examiners at the next annual examination.

Public School Leaving Examinations.

28. Public school leaving examinations will be held annually at every high school and collegiate institute, and at such other places as may be recommended by the inspector. A person who wishes to write at the public school leaving examination must, before the 24th of May, give the necessary notice to the inspector on a form to be obtained from him. The answer papers will be examined at the Education Department immediately after the examination is held, and a report of the results will be forwarded to the inspector, or to the high school principal, if the examination was held at a high school centre. The Board of Trustees where such examination is held shall pay all the cost of the examination, but will receive from the inspector half the fees paid by candidates.

29. Candidates at the public school leaving examination shall take the following subjects, to be valued as herein mentioned, viz.: reading, 50; drawing, writing with book-keeping and commercial transactions, English composition, English literature, history, geography, algebra, geometry, botany each 100; English grammar and rhetoric, arithmetic and mensura-

tion, each 150. Any candidate who obtains one-third of the marks in each subject and one-half (67 per cent. for honours), of the aggregate marks shall be considered as having passed the public school leaving examination, provided, also, that a candidate who fails on one or more subjects may, if he makes considerably more than 50 per cent. on the total, be awarded a public school leaving certificate. The Board of Examiners for high school entrance examinations may admit to a high school candidates who have failed at a public school leaving examination, providing they have made one-quarter of the marks on each entrance examination subject.

High Schools and Collegiate Institutes.

Accommodation and Equipment.

30. The plans of every high school hereafter erected, and the plans and site of every high school hereafter established, shall be subject to the approval of the Minister of Education. In all high schools established since July, 1891, or to be hereafter established, there shall be a principal and at least two assistants. No new high school shall be entitled to receive any grant that does not provide at least the amount fixed by the instructions of the Minister of Education with regard to accommodation and the equipment required as the maximum in distributing the legislative grant to schools with two masters.

31. Any high school may be raised to the status of a collegiate institute when it is shown to the satisfaction of the Education Department that the trustees have provided: (*a*) adequate school buildings; (*b*) equipment of the value and character required as the maximum in the case of high schools with three or more masters; (*c*) four specialists, viz., one in classics, one in mathematics, one in science, one in modern languages including English (one of whom or some other member of the staff being also a commercial specialist), and (*d*) such other assistants as will secure thorough instruction in all the subjects of the high school course as far as senior matriculation into the University of Toronto. A collegiate institute may be reduced to the rank of a high school on the joint report of the high school inspectors, approved by the Education Department.

32. Every high school that complies with the regulations of the Education Department shall be entitled to the following grants: (*a*) a fixed grant of 375 dollars; (*b*) in respect of school accommodation, a maximum of 100 dollars in the case of high schools with two masters and of 150 dollars in the case of high schools with three or more masters; (*c*) in respect of equipment, ten per cent of the total approved expenditure but so as not to exceed 110 dollars in the case of high schools with two masters; or 220 dollars in the case of high schools with three or more masters; (*d*) in respect of salaries ten per cent. of the expenditure over 1,500 dollars but so as not to exceed 600 dollars in any case; (*e*) such amount *pro rata* in respect of average attendance as may remain unexpended of the grant.

33. Every collegiate institute that complies with the regulations of the Education Department shall be entitled; (*a*) to a fixed grant of 375 dollars; (*b*) to a grant in respect of equipment of 275 dollars; (*c*) to a grant in respect of school accommodation of 200 dollars; (*d*) to ten per cent. of the expenditure on salaries over 1,500 dollars but so as not to exceed 600 dollars; and (*e*) to a grant on the basis of average attendance out of any unexpended balance of the legislative grant.

34. In apportioning the legislative grant on equipment, the maximum recognized in the case of high schools with two masters shall be as follows: library, 300 dollars; physical and chemical apparatus, 300 dollars; maps and globes, 50 dollars, and models for drawing, 50 dollars; gymnasium, not including equipment, 400 dollars. In the case of collegiate institutes and high schools with three masters the maximum recognized shall be: library,

600 dollars ; physical and chemical apparatus, 600 dollars ; maps and globes, 100 dollars, and models for drawing, 100 dollars ; gymnasium, not including equipment, 800 dollars.

35. When the value of the library has reached the maximum herein recognized, ten per cent. of the annual expenditure by the High School Board on supplemental reading in English Literature will be allowed. The catalogue of the equipment shall be kept by the principal of the school and shall be accessible to any officer of the Education Department. The instructions of the Minister of Education in the matter of grading shall be followed in appropriating the grant for buildings and premises. On the report of a high school inspector, such reductions may be made in the grants payable upon the salaries of the staff, and the character and equipment of the school buildings and their appendages as the Minister of Education may deem expedient.

High School Organization.

36. In every high school or collegiate institute the head teacher shall be called the principal, and the other teachers assistants. The authority of the principal of the high school shall be supreme as to all matters of discipline on the school premises, where the public and high school occupy the same building. The provisions of the Public Schools Act, 1896, Section 76, and the regulations of the Education Department with respect to the duties of pupils attending a public school shall apply to teachers and pupils of high schools.

37. The principal of a high school or collegiate institute shall hold a principal's certificate and the assistants shall hold high school assistants' certificates. Special teachers of music, drawing, drill, gymnastics and calisthenics, shall possess qualifications satisfactory to the Minister of Education. If, after due advertisement, a high school board is unable to obtain a qualified assistant, a temporary certificate may be granted by the Minister of Education for the current half year to a suitable person on the application of the board.

38. The principal shall determine the number of pupils to be assigned to each form and the order in which the subjects in each form shall be taken up by the pupils. The principal shall make such promotions from one form to another as he may deem expedient ; he shall also assign the subjects of the course of study among the assistants.

39. The course of study in high schools shall be taken in four forms. The subjects marked with an asterisk in Forms I. and II. are optional ; all the other subjects are obligatory. No subjects shall be taken in any form other than the subjects herein prescribed. All pupils shall take the obligatory subjects in Forms I. and II. and such other subjects in any of the forms as may be required for departmental or other examinations or as may be chosen by their parents or guardians and the principal of the school, provided that pupils taking the course for a commercial diploma shall be required to take only the subjects of such course. Typewriters may be furnished by the Board of Trustees for the use of the pupils. At the option of the Board of Trustees and the principal, the art school drawing course may be taken in Forms II. and III., and agricultural chemistry, physiology and temperance and vocal music may be taken in any form.

40. Reading shall be taught twice a week during the academic year to all the pupils in each of the sub-divisions of Forms I. and II. and to the pupils in the other forms in connection with the English Literature. Writing shall be taught during the first term at least twice a week in the lowest division of Form I., and provision shall be made for additional practice in school hours. Half-hour periods separate from the other subjects shall be allotted to reading and writing in the time table. Where the average number of pupils in a class exceeds twenty-five, the time devoted to reading and writing shall be proportionately extended. On the report of a high school inspector a

deduction from the legislative grant may, at the discretion of the Minister of Education, be made of 50 dollars in the case of the non-observance of any high school or collegiate institute of any part of this regulation.

41. In high schools and collegiate institutes having a gymnasium, drill, gymnastics and calisthenics shall be taught in half-hour periods and in organized classes not less than three times a week in each division of Forms I., II. and III., but shall be optional in Form IV.; additional time shall be allowed for practice by pupils under efficient supervision. No pupil shall be exempted from the course prescribed, except upon a medical certificate or on account of evident physical disability. During the months of May, June, September, October, and November, the principal may substitute for drill, etc., not more than twice a week, such sports and games as he may approve of. In high schools having no gymnasium, drill and calisthenics shall be taught as the weather may permit; and gymnastics may be omitted.

High School Course of Study.

42. The details of the courses of study and examination requirements in each form in high schools shall be as set forth in Schedule B—High School Courses of Study. (*See* below.)

High School Examinations.

43. An examination will be held annually by the Education Department, subject to the conditions hereinafter contained, on the high school course of study at each high school and collegiate institute and at such other centres as may be approved. Candidates intending to write should make application to the public school inspector before the 24th of May on a form to be obtained from him. One examination paper will be given in each subject except in the case of Biology of Form IV., in which there shall be two papers, and of Latin, Greek, French, and German for Forms III. and IV., in which there shall be two examination papers—one in Authors and Grammar and one in Composition. The papers shall be valued as follows:—

Form I.– Reading (oral examination), 50; Drawing, English Composition, History, Geography, Algebra, Geometry, Botany, Writing with Book-keeping and Commercial Transactions, English Grammar and Rhetoric, Arithmetic and Mensuration, each 150.

Form II.—Part I.—English Grammar and Rhetoric, 200; Arithmetic and Mensuration, 200; History of Great Britain and Canada, 150; Physics, 100; Part II.—English Composition, 100; English Literature, 150; Algebra, 150; Geometry, 100. Optional Subjects.—Latin, Greek, French, German, each 150.

Form III.—English Composition, 100; English Literature, 150; Algebra, 150; Geometry, 125; Ancient History, Physics, Botany, Chemistry, Latin, Greek, French, German, each paper 75.

Form IV.—Part I.—English Composition, 100; English Literature, 150; Algebra, 150; Geometry, 125; Trigonometry, 125; English and Ancient History, 100. Part II.—Physics, 100; Chemistry and Biology, each 75; Latin, Greek, French, and German, each paper 75.

Commercial Course.—The examination for Commercial Diploma will be as hereinafter defined and as set forth in Schedule B.

High School Certificates.

44. Candidates at high school examinations will be awarded a certificate in the form, or in Part I. or II. of the form, as the case may be (where part of a form is prescribed as a separate division of their examination) in which they may have passed. The examination in any form, or in Part I. or II. of any form (where a form is divided for examination purposes)

may be taken in such order or at such intervals of one or more years as the candidate may desire. Candidates who fail in any subject in a form, or in the part of a form prescribed for their examination, shall, if they present themselves again, take the whole examination in such form or part of a form. No candidate shall be required to pass a second time in the form or part of a form for which he has received a certificate.

45. To obtain primary standing candidates shall take the public school leaving examination as defined for public schools (which shall be that for Form I.), and at the same time or in a different year, both parts of Form II. taken together. To pass the public school leaving examination or the examination of Form II., candidates must obtain one-third of the marks assigned to each subject, and 50 (67 for honours) per cent. of the aggregate of marks, provided that in the case of the former a candidate who fails on one or more subjects may, if he makes considerably more than 50 per cent. on the total, be awarded a certificate. They may also write on the optional subjects of Form II. The marks obtained on the optional subjects shall be added to the aggregate marks, by way of bonus, provided the candidate receives one-third of the marks assigned to the subject.

46. To obtain junior leaving standing candidates shall take the public school leaving examination and Part I. of the Second Form examination, unless they have already passed these examinations, and the following subjects of the Third Form examination, viz.:—English Composition, English Literature, Ancient History, Algebra, Geometry, Latin and one of the following groups, viz.:—(a) French and Greek; *or* (b) German and Greek; *or* (c) French, German and Chemistry; *or* (*d*) French, Physics, Botany, and Chemistry; *or* (e) German, Physics, Botany and Chemistry. Candidates who obtain one-third of the marks assigned to the subjects in Part I. of the Second Form shall be given a certificate to that effect. A separate certificate will also be given to candidates who pass on the same standard in the subjects of the Third Form, no percentage on the total being required for either of these certificates, but 67 per cent. giving honours in the latter case. (*See* above, Part II., § XII., *a* and *b*.)

47. To obtain senior leaving standing candidates shall take the public school leaving examination and Part I. of the Second Form examination, unless they have already passed these examinations; and in addition Part I. of the Fourth Form examination; and of Part II., Form IV., Latin and Physics, with one of the following groups, viz.:—(*a*) Greek and French, or (*b*) Greek and German, or (*c*) French, Chemistry and Biology, or (*d*) German, Chemistry and Biology. Certificates will be given candidates who pass one or both parts of Form IV. at this examination, the standard for passing being one-third on each paper. No percentage will be required on the total, but 67 per cent. will secure honours when Parts I. and II. are taken together. Candidates for senior leaving standing who hold junior leaving standing are required to take only Part I. of the Fourth Form examination and the subjects of Part II. of the Fourth Form, hereinbefore mentioned. (*See* above, Part II., § XII., *c* and *d*.)

48. A candidate for junior or senior leaving standing who has passed Part I. of the Second Form examination, shall be awarded a certificate on application to the Education Department of having passed in Form II., notwithstanding his failure to obtain junior or senior leaving standing, providing such candidate has obtained one-third of the marks at this examination in the subjects of Part II. of the Second Form examination.

49. The standing of the second, third, and fourth years in Arts after a regular course in any University in the British dominions, will be accepted in lieu of the primary, junior leaving and senior leaving standing respectively.

50. The course for a commercial diploma may be taken in two parts. Both parts may be taken in different years or in the same year, at the option of the candidate. Part I. shall consist of book-keeping and writing, 200 marks; commercial transactions, business forms and usages, 200 marks.

stenography (theory), 100 marks; stenography (dictation), 100 marks. Part II. shall consist of the examination papers in Form II. in arithmetic and mensuration, history of Great Britain and Canada, English composition, English literature and algebra. The marks in these subjects shall be the same as in Form II. Candidates shall be required to make one-third of the marks in each subject in each part, and one-half of the aggregate of each part to obtain pass standing. Candidates who hold a certificate of having passed in Form II., or in any part of a higher form, shall be required to write only on Part I. of the Commercial Course.

Specialists' Standing.

51. Any person who obtains an Honour degree in the department of English and History, Moderns and History, Classics, Mathematics, or Science as specified in the calendars of any University of Ontario and accepted by the Education Department, shall be entitled to the non-professional qualification of a Specialist in such department. A graduate who has not taken an Honour degree in one of the above courses shall be entitled to the non-professional standing of a Specialist on submitting to the Department of Education a certificate from the Registrar of the University that he has passed, subsequent to graduation, the examinations prescribed for each year of the Honour course of the Department for which he seeks to be recognised as a Specialist, and which he has not already passed in his undergraduate course; or any examination which is recommended by the University as equivalent thereto and accepted as such by the Education Department.

Examination and other Fees.

53. The fees authorised by the Education Department shall be as follows: Candidates for the Entrance Examination, if so ordered by the Board of Trustees or the County Council, 1 dollar; Public School Leaving, 2 dollars; Commercial diploma, each part, 2 dollars; Second Form examination, Part I., 2 dollars; the whole of Form II., 5 dollars: Third Form examination, 5 dollars; Fourth Form examination, Parts I. and II., each 3 dollars; taken together, 5 dollars; for candidates for examination in one or more subjects only, for the purpose of completing a course for pass matriculation into any university or learned profession, 2 dollars; Tuition County Model School, when so ordered by the Board of Trustees, 5 dollars; kindergarten assistants, 3 dollars; directors, 5 dollars; examination Normal School, 2 dollars; examination Normal College, 10 dollars, appeals of all kinds, 5 dollars. (Fee to be refunded if the appeal is sustained.)

Kindergartens.

54. No person shall be appointed to take charge of a kindergarten in which assistant teachers or teachers-in-training are employed, who has not passed the examination prescribed for a director of kindergartens; and no person shall be paid a salary or allowance for teaching under a director who has not passed the examination prescribed for directors or assistant teachers. No person shall be admitted to the course of training prescribed for assistants who is not seventeen years of age and who has not primary standing, or who has not spent at least three years in a high school. Any person who has taken the equivalent of such a course at some other educational institution may, on the recommendation of the inspector, be admitted to training with the consent of the Minister of Education. No person shall be admitted to the course prescribed for a director unless such a person has obtained an assistant's certificate.

55. Any person who attends a kindergarten for one year and passes the examinations prescribed by the Education Department shall be entitled to an assistant's certificate. The holder of an assistant's certificate, or the holder of a second-class provincial certificate shall, on attending a provincial kindergarten one year and on passing the prescribed examinations, be entitled to a director's certificate.

56. The examination for directors shall include psychology and the general principles of Froebel's system; history of education; theory and practice of the gifts and occupations; Mutter and Kose-Lieder; botany and natural history; miscellaneous topics, including discipline and methods of morning talks, each 100; practical teaching, 500; bookwork, 400. There shall also be a sessional examination in music, drawing, and physical culture to be reported by the principal to the examiners at the final examination. The examination for assistants shall include the theory and practice of the gifts (two papers); theory and practice of the occupations (one paper); miscellaneous topics, including the general principles of Froebel's system and their application to songs and games, elementary science, morning talks and discipline (one paper), each paper, 100; bookwork, 400. Any director sending up candidates to the examination for assistants' certificates shall certify that the Pease-work and Modelling have been satisfactorily completed.

County and City Model Schools.

57. The Board of Examiners for every county shall, and the trustees o any city, with the approval of the Minister of Education, may set apart at least one public school for the professional training of third-class teachers. The principal of such school shall be the holder of a first-class certificate from the Education Department and shall have at least three years' experience as a public school teacher. In every model school there shall be at least three assistants on the staff who shall be the holders of first or second-class certificates. The County Board of Examiners shall distribute the teachers-in-training among the county model schools as may be deemed expedient.

58. The model school term shall begin on the second of September and shall close on the fifteenth day of December. During the term the principal of the public school to which the model school is attached shall be relieved of all public school duties except the management and supervision of the public school. The assistants shall give such instruction to the teachers-in-training as may be required by the principal or by the regulations of the Education Department. There shall be a room for the exclusive use of the teachers-in-training either in the public school buildings or elsewhere equally convenient.

59. Application for admission to a model school shall be made to the inspector not later than the twenty-fifth of August. Any person who has primary or a higher standing, or who is considered eligible by the Board of Examiners for a district certificate and who will be eighteen years of age before the close of the term may be admitted as a teacher-in-training. The teachers-in-training shall be subject to the discipline of the principal with an appeal in case of dispute to the Chairman of the County Board of Examiners. Boards of Trustees may impose a tuition fee, not exceeding 5 dollars, on each teacher-in-training.

60. The course of study in model schools shall consist of instruction in school management, to be valued for examination purposes at 100; instruction in the science of education, 100; instruction in the best methods of teaching all the subjects on the public school course of study, two papers, 100 each; instruction in the school law and regulations so far as they relate to the duties of teachers and pupils, instruction in school hygiene, music and physical culture, 50 each; and such practice in teaching as will cultivate correct methods of presenting subjects to a class and develop the

art of school government. The final examination of the Education Department will be limited to school management, the science of education, methods, school hygiene, and the school law and regulations.

61. The principal of the school shall submit to the Board of Examiners a report with respect to the standing of every teacher-in-training, having regard to his conduct during the session, his aptitude as a teacher, his powers of discipline and government in the school room and such other qualities as in the opinion of the principal are necessary to a successful teacher. The principal shall also report the standing of each teacher-in-training in the subjects of hygiene, music and physical culture as determined by at least one sessional examination. These reports shall be considered by the Board of Examiners at the final examination in estimating the standing of the candidates for a certificate in all cases of doubt.

62. During the last week of the session the county board of examiners shall require each teacher-in-training to teach in the presence of such members of the board as may be appointed for that purpose, two lessons of 20 minutes each, one of which shall be assigned by the presiding examiner one day before, and the other 40 minutes before it is to be taught. Each lesson shall be valued at 100, shall be appraised by different examiners and shall not be taught in the same form nor in the same subject. The Board of Examiners shall also submit the candidates to a practical test of their ability to place upon the blackboard with neatness and despatch any exercise for pupils they may deem expedient. The time allowance for such a test shall not exceed 10 minutes and the valuation 50.

63. Any teacher-in-training having primary standing who obtains 40 per cent. of the marks assigned to each subject (including practical teaching), and 60 per cent. of the aggregate shall be awarded a third class certificate valid for three years. At the request of the county board and with the permission of the Minister of Education, a certificate for a shorter period and valid only within the jurisdiction of the county board, to be known as a district certificate, may be awarded to teachers-in-training who obtain a lower percentage, or to such other persons whose non-professional standing would entitle them only to district certificates. The board may reject any candidate whose scholarship appears to be defective. The decision of the board with respect to the examination shall be final.

District Model Schools.

64. The Minister of Education may set apart two public schools in each of the districts of Thunder Bay, Algoma, Parry Sound and Nipissing as Model Schools for candidates for district certificates. No school shall rank as a district model school unless the teaching staff consists of at least three teachers, viz. : a principal holding a first class certificate and at least one of his assistants holding a second-class certificate. Teachers-in-training at district schools shall take the course of study and the final examinations prescribed for public school leaving examinations. Candidates for teachers certificates at the district model school examinations shall be at leas 18 years of age, and shall take such a course of professional training in the subjects prescribed for county model schools as the Inspector of the district may direct.

65. In cities and counties where the French or German language prevails, the Board of Examiners, with the approval of the Education Department may establish a model school for the training of teachers of French or German origin ; such school shall hold one term each year, viz. : from the 1st of September to the 1st of July. The course of study shall be the non-professional course required for a public school leaving certificate and the professional course required for a county model school. The examination in English shall be conducted on the papers prescribed for the public school leaving certificate. The examination in French or German shall be limited

to reading, grammar, and composition, and may be both oral and written. The papers in French and German shall be prepared by the Board of Examiners. The board may submit the teachers-in-training to such an examination on the professional course as it deems expedient.

PROVINCIAL NORMAL AND MODEL SCHOOLS.

66. There shall be two sessions of the normal school each year; the first session shall open on the third Tuesday in January and the second session on the third Tuesday in August. The sessions shall close in June and December at such dates as may be determined by the Minister of Education. Any teacher who has at least junior leaving standing, and who has taught a public school successfully for one year, or who, after passing the county model school examination, has taught under the supervision of the inspector of a city having a city model school, six months thereafter may be admitted as a normal school student.

67. Before being registered, every student admitted to a normal school shall be examined, in writing or orally, by the normal school masters upon the books prescribed for the calendar year as the reading course for teachers. Any teacher may be refused registration whose examination does not show a thorough acquaintance with such reading course. The course of study after admission shall be limited and valued for examination purposes as follows:—Psychology and Science of Education, 200; History of Education and School Management, each 150; Methods of Teaching (four papers), each paper 100; Practice Teaching in the Model School, 400.

68. The principal of the normal school shall be responsible for the discipline and management of the teachers-in-training. He shall prescribe the duties of the staff subject to the approval of the Minister of Education; he shall cause sessional examinations to be held in temperance, agriculture, reading, writing, drawing, music and physical culture, each valued at 50 marks, and shall keep a record of the same. The staff shall carry out the instructions of the principal with regard to discipline, management, methods of study and all matters affecting the efficiency of the normal school and the progress of the teachers-in-training.

69. Teachers-in-training shall attend regularly and punctually throughout the session and shall submit to such discipline and direction as may be prescribed by the principal. They shall lodge and board at such houses only as are approved by the principal. Ladies and gentlemen shall not board at the same house and shall have no communication with one another except by permission of the principal or one of the masters.

70. Teachers-in-training shall take a written examination towards the end of each session, to be conducted by the staff, covering every subject on the course of study. The standing of candidates at this examination shall be added to the marks prescribed for the final examination. At the close of each session candidates shall submit to a written examination conducted by the Education Department. The examiners shall have power to reject any candidate who shows deficiency of scholarship.

71. An examination in practical teaching, to be conducted according to the instructions of the Minister of Education, shall be required of every teacher-in-training. This examination shall be valued at 200 marks. Any candidate who obtains 34 per cent. of the marks in each subject of the written examinations (the sessional and final written examination being taken jointly), and 34 per cent. of the marks in teaching (the report of the staff and the report of the special examiners being taken jointly), and 50 per cent. of the aggregate marks shall be entitled to pass standing. Candidates making 75 per cent. of the aggregate marks shall be awarded honours.

72. The terms of the Provincial Model School shall correspond with the public school terms in cities. The hours of study shall be from 9.30 a.m. to 12 a.m., and 1.30 p.m. to 3.30 p.m. The regulations of the Education

Department with regard to pupils and teachers in public schools shall apply to the teaching staff and to pupils of the model school, subject to any modifications that may be made by the Minister of Education from time to time.

73. The head master and head mistress of each model school and the director of the Provincial Kindergarten shall act under the direction of the principal of the normal school to which their respective departments are attached, and shall be responsible to him for the order, discipline and progress of the pupils, and for the accuracy and usefulness of the lessons conducted by the teachers-in-training. All members of the teaching staff shall report themselves for duty to the principal of the normal school not later than one day before the re-opening of the school after the Easter, Mid-Summer and Christmas vacations.

Ontario Normal College.

74. The Ontario Normal College shall open each year on the 1st of October and close on the 31st of May. Any person who has senior leaving standing or who is a graduate in arts of any university in the British Dominions, and who will be eighteen years of age before the close of the college year, may be admitted as a teacher-in-training on application to the Minister of Education on or before the 15th of September.

75. The course of study shall consist of lectures on Psychology, the History of Educational Systems, the Science of Education, the best methods of teaching each subject on the high school course of study, School management; instruction in Reading, School Hygiene, Writing, Drawing, Stenography, Physical Culture; practice teaching; and such other subjects as may be prescribed by the Minister of Education. The marks allowed for examination purposes shall be as follows: Psychology and Science of Education, each 200; History of Education, School Management, Methods in English, in Mathematics, in Science, in Classics, and in French and German, each 150.

76. Teachers-in-training shall lodge in such houses only as are approved by the principal; ladies and gentlemen shall not board in the same house nor shall they mingle together in the class-rooms or in the halls of the Normal College. They shall attend regularly and punctually upon lectures and shall submit to the rules of the college with regard to discipline, or any other matter required by the principal, and shall undertake such practice teaching as may be prescribed by the Minister of Education.

77. The principal shall be responsible for the organization and management of the college and for the discipline of the teachers-in-training. He shall prescribe the duties of his staff, and shall from time to time be present at their instruction and at the practice teaching of the teachers-in-training. He shall report the sessional examinations to the Education Department on the forms prescribed by the Minister of Education, and shall make in addition such observations with respect to the conduct of each teacher-in-training and his aptitude as a teacher as he may deem expedient.

78. Each lecturer shall explain and illustrate the best method of dealing with each branch of his department as it should be taught in the different forms of a high or public school, and shall, as far as possible, explain and justify his methods on scientific principles, giving model lessons for classes in different stages of advancement. He shall keep a record of the practice teaching of each teacher-in-training, and shall report to the principal from time to time any breach of discipline or any irregularity on the part of the teachers-in-training or any other matter that comes to his notice which may affect the work of the college.

79. Teachers-in-training shall take two written examinations during the session, viz., one in December and the other in March, and such oral examinations as may be considered necessary for testing their knowledge of methods and their teaching ability. These examinations shall be conducted by the staff of the college; the number of papers at the sessional examinations and the value of the marks in each subject shall be the same as are prescribed for the final written examination. No teacher-in-training shall be recommended to pass by the examiners who has made less that 34 per cent. of the marks at the sessional examinations (50 marks being the maximum for each) in reading, writing, drawing, or physical culture. Any candidate who obtains 34 per cent. of the marks in each subject of the examinations (the sessional and final written examinations being taken jointly) and 50 per cent. of the aggregate marks, shall be entitled to pass standing. Candidates making 75 per cent. of the aggregate marks shall be awarded honours.

80. At the end of May in each year the teachers-in-training shall submit to an examination conducted by the Education Department. Any candidate who obtains the required standing in Psychology, the Science of Education, the History of Education, School Management, Methods in Mathematics, Methods in English, Methods in Latin, Methods in Elementary Science (the primary course in Botany and Physics) and methods in one of the following groups, viz.: (*a*) Greek, or (*b*) French and German, or (*c*) Chemistry, Physics and Biology, shall be entitled to a normal college interim certificate. The holder of a specialist's non-professional certificate in any of the courses recognised by the Education Department, who passes the final examination (including methods in the subjects of his non-professional certificate) shall be entitled to a normal college interim specialist's certificate in the subjects of his non-professional specialist's course.

The Educational Council.

81. The Educational Council, authorised by the Education Department Act, 1896, to conduct departmental examinations, shall hold its first meeting each year as may be fixed by the Minister of Education and shall organise by electing as chairman one of its members. Subsequent meetings of the Council shall be held from time to time as may be determined by the Council.

82. The Council shall appoint examiners of well known ability as teachers either in a university or high school, to prepare examination papers for the examinations of the pupils in the second, third and fourth forms of high schools and collegiate institutes, and such other examinations as may be transferred to the Council with the approval of the Education Department. The Council shall also appoint examiners of well known experience as inspectors or teachers (from lists to be submitted by the Minister of Education), to prepare examination papers at all other departmental examinations.

83. For the purpose of reading the answer papers of candidates at the examinations of Forms II., III. and IV., the Council shall appoint, as associate examiners, graduates of any of the universities in the British dominions or specialists according to the regulations of the Education Department actually engaged in teaching. For the purpose of reading the answer papers of candidates of other examinations the Council shall appoint as associate examiners, persons holding first class certificates (in the case of kindergarten examinations, teachers specially qualified) in actual service. The lists from which such selection is made shall be furnished by the Minister of Education and shall in each case contain, if required by the Council, the names of at least twice the number of associate examiners to be appointed. The number of examiners appointed by the Council for each examination shall be subject to the instructions of the Minister of Education from time to time.

84. All communications or references requiring the attention of the Council shall be addressed to the Education Department. The Registrar of the Council shall submit for consideration all matters referred by the Minister of Education. The Council shall report promptly to the Minister of Education all matters that require any action by the Education Department or any of its officers. The Council shall appoint an executive committee. The Education Department shall appoint a chairman of the Board of Examiners who shall exercise such supervision over the examinations as the Council may order. Candidates may have their papers re-examined on placing an appeal to that effect in the hands of the Minister of Education within 20 days after the publication of the results of the examination.

Teachers' Certificates.

85. The Minister of Education may issue certificates, on the report of the Educational Council or the Education Department, as follows, viz., any person who attends a public kindergarten for one year and passes the prescribed examination shall be entitled to an assistant's certificate; any person who has obtained an assistant's certificate and who has attended a provincial kindergarten one year and passes the prescribed examinations shall be entitled to a director's certificate. Any person who attends a normal school one term and who passes the prescribed examinations shall be entitled to a second class public school certificate. Any person who has passed the final examinations of the normal college shall be entitled to a normal college interim certificate.

86. A normal college interim certificate shall entitle the holder, if under 21 years of age, to teach in a public school only, and if over 21 years, to teach in public or high school. After two years' successful experience as teachers, the holders of such certificates shall, on the report of the inspector concerned, be entitled to a permanent certificate as a first class public school teacher or as a high school assistant, ordinary or specialist, according to the class of school in which the experience was acquired. Normal college interim certificates may be extended from year to year on the report of a public or high school inspector. Any graduate in Arts in any university in the British Dominions, who holds a high school assistant's certificate, and who, as shown by the report of the high school inspector, has taught successfully three years (two of which at least were spent in a high school), shall be entitled to a certificate as principal of a high school or collegiate institute.

87. A third class certificate shall be valid for the full period of three years from the date thereof; and may on expiration be renewed by any Board of Examiners for any period not exceeding three years, on the following conditions, viz.:—(*a*) Where the applicant has re-passed the Form II. examination or holds any other non-professional certificate of a higher grade; (*b*) where the applicant attempted such examination and obtained a standing acceptable to the Board; (*c*) where the applicant has re-passed the county model school examination. The certificate of any teacher who has not taught the full period of three years for which his certificate was granted may be extended by the county board for any time lost by sickness or any other cause. In all cases the report of the inspector with respect to the efficiency of the applicant as a teacher must be satisfactory. All renewals shall be issued with the authority of the Board, and shall be limited to the jurisdiction of the Board of Examiners granting the same.

88. In case it appears that a duly qualified teacher is not available, and that it is in the public interest that a teacher should be temporarily retained in any school, the Minister of Education may, on the report of the inspector, extend a third class certificate for one year, such certificate to be valid only under the Board of Trustees applying for the same. With the consent of the Minister of Education, a temporary certificate may be given by the inspector to any person of suitable character and attainments where a qualified teacher is not available.

Public School Inspectors and Duties of Inspectors Generally.

89. Any person with five years' successful experience as a teacher, of which at least three years shall have been in a public school; who holds either specialist's non-professional standing obtained on a university examination, or a degree in arts from any university in Ontario with first class graduation honours in one or more of the other recognised departments in such University; and who has passed the examinations of the Ontario Normal College for a specialist's certificate shall be entitled to a certificate as an inspector of public schools.

90. Every inspector, of any class of schools conducted under the Education Department, while officially visiting a school, shall have supreme authority in the school, and may direct teachers and pupils in regard to any or all of the exercises of the school-room. He shall, by personal examination or otherwise as he may be directed by the Minister of Education, ascertain the character of the teaching in the schools which he is authorised to visit, and shall make inquiry and examination in such manner as he may think proper, into the efficiency of the staff, the accommodation and equipment of the school, and all matters affecting the health and comfort of the pupils. He shall report to the Minister of Education any violation of the Schools Act or the regulations of the Education Department in reference to the class of schools for which he is inspector.

Teachers' Institutes.

91. Every teachers' institute shall have one meeting each year on a Friday and Saturday to be named by the management committee. The county council may allow Thursday to be taken also if considered expedient. The institute shall hold two sittings per day of three hours each for at least two days, and one evening sitting. All questions and discussions foreign to the teachers' work shall be avoided. The officers of the institute shall be a president, vice-president and secretary-treasurer. There shall be a management committee of five persons, to be appointed by the members of the institute. The officers and the management committee shall be elected annually.

92. The inspector shall furnish the secretary of the institute with a list of teachers in his county or inspectoral division. Every public school teacher shall attend continuously all the sessions of the institute of his county or inspectoral division and shall answer to the calling of the roll at the opening and closing of each session. A report of the sessions attended by each teacher shall be sent by the secretary to the Board of Trustees employing such teacher.

Teachers' Reading Course.

93. The Minister of Education may prescribe a course of reading for the teachers of public schools. The course shall extend over three years and certificates for reading more than three books in one year shall not be granted by the Inspector. For the purposes of the course the year shall correspond with the calendar year. A teacher may enter on the course by taking any of the books prescribed for the year. The list of books for each year will be announced by the Education Department.

94. Any teacher who desires a certificate of having taken the public school teachers' reading course shall make a synopsis of not less than ten or more than fifteen pages of each book read, and shall transmit the same to the inspector of his district on or before the 30th of June in each year. Such synopsis shall be accompanied by a fee of twenty-five cents and a declaration that the books prescribed for the year were read and that the synopsis submitted was prepared without assistance by the person signing the same.

95. The management committee of each teachers' institute shall appoint two persons, who with the inspector shall form a committee for determining whether the synopsis made by the teacher desiring a certificate indicates that the books have been read intelligently. The inspector shall issue a certificate for each book so read, on the form prescribed by the Minister of Education to every teacher whose synopsis has been found satisfactory. If a teacher is unable to read all the books prescribed for the year or if his synopsis of any book has been rejected, he may substitute the books of the next year for those omitted or rejected.

96. Any teacher who submits to the Education Department certificates showing that he has satisfactorily read nine of the books prescribed, shall be entitled to receive from the Minister of Education a diploma certifying to the completion of one full reading course covering three years. Additional diplomas shall be awarded to teachers who complete additional courses of three years.

Religious Instruction.

97. Every public and high school shall be opened with the Lord's Prayer, and closed with the reading of the Scriptures and the Lord's Prayer, or the prayer authorised by the Department of Education. When a teacher claims to have conscientious scruples in regard to opening or closing the school as herein prescribed, he shall notify the trustees to that effect in writing; and it shall be the duty of the trustees to make such provision in the premises as they may deem expedient.

98. The Scriptures shall be read daily and systematically, without comment or explanation; the portions used may be taken from the book of selections adopted by the Department for that purpose, or from the Bible, as the trustees, by resolution, may direct. Trustees may also order the reading of the Bible or the authorized Scripture Selections by both pupils and teachers at the opening and closing of the school, and the repeating of the Ten Commandments at least once a week.

99. No pupil shall be required to take part in any religious exercise objected to by his parents or guardians, and in order to the observance of this regulation, the teacher, before commencing a religious exercise, is to allow a short interval to elapse, during which the children of Roman Catholics, and of others who have signified their objection, may retire. If in virtue of the right to be absent from the religious exercises, any pupil does not enter the school room till the close of the time allowed for religious instruction, such absence shall not be treated as an offence against the rules of the school.

100. The clergy of any denomination, or their authorized representatives, shall have the right to give religious instruction to the pupils of their own church, in each school house, at least once a week, after the hour of closing the school in the afternoon; and if the clergy of more than one denomination apply to give religious instruction in the same school house, the Board of Trustees shall decide on what day of the week the school house shall be at the disposal of the clergymen of each denomination, at the time above stated. But it shall be lawful for the Board of Trustees to allow a clergyman of any denomination, or its authorized representative, to give religious instruction to the pupils of his own church providing it be not during the regular hours of the school. Emblems of a denominational character shall not be exhibited in a public school during regular school hours.

Grants to Weak Schools.

101. Where on the report of the inspector or on other satisfactory evidence it appears that any school section is so limited in area, or is so remote from market or railway accommodation, or has suffered from any exceptional cause as to clearly establish the inability of the ratepayers to

bear the ordinary burdens of taxation for school purposes, the Minister of Education may appropriate to such section out of the grant to poor schools such sum of money from year to year as he may deem expedient.

102. The inspector shall submit to the county council at the regular meeting thereof in January or June of each year, a list of schools in his inspectoral division where the assessment for school purposes is insufficient for the proper maintenance of the school, and shall indicate in each case any special reason why the statutory grants for school purposes should be supplemented by the county council.

103. All schools receiving special grants, either from township or county councils, shall receive from the Poor School Fund, voted by the Legislature, the equivalent of such special grant, provided the sum voted by the Legislature is sufficient. When the legislative grant is not sufficient to admit of paying the equivalent of the county or township grant, then such grant shall be made *pro rata*. Any portion of the Poor School Fund remaining after such payments are made may be distributed among other weak schools on the report of the inspector.

Superannuated Teachers.

104. Any subscriber to the fund for superannuated teachers who fails or neglects to pay the annual subscription of four dollars on or before the 31st of December in any year, shall be required to pay for such year the sum of five dollars. In the case of persons under sixty years of age who have been placed upon the superannuated list, proof of disability for professional service shall be furnished annually to the Department. Should it appear that any superannuated teacher under sixty years of age is capable of resuming his profession, the allowance shall in the meantime be withdrawn. No allowance shall be paid unless satisfactory evidence of good moral character is furnished to the Education Department annually, or when required.

Text Books.

105. The copyright of every authorised text book shall, where possible, be vested in the Education Department. The publisher of an authorised text book shall submit to the Minister of Education a sample copy of every edition for approval, and no edition of any text book shall be considered as approved unless a certificate to that effect, in writing, has been issued by the Minister of Education.

106. Before any authorised text book is placed on the market, the publisher thereof shall execute such agreements and give such security for the publication of such book as may be required by the Minister of Education. Any authorised text book shall be subject at every stage of its manufacture to the inspection and approval of the Education Department as regards printing, binding and paper, and may be removed from the list of authorised text books in case the publisher fails to comply with the regulations of the Education Department

107. Every authorised text book shall bear the imprint of the publisher, and shall show upon the cover the authorised retail price. No part of an authorised text book shall be used for advertising purposes, and no change shall be made in the letterpress, binding or paper of any authorised text book without the consent of the Minister of Education. Books recommended as reference books shall not be used as text books by the pupils, and any teacher who permits such books, or any other book not authorised as a text book for the public schools, to be used as such, shall be liable to such penalties as are imposed by the School Act.

General Directions to Trustees.

108. The notice calling an annual or special meeting should be signed by the secretary or by a majority of the trustees. Any ratepayer may call the meeting to order and nominate a chairman as soon as the hour appointed arrives. The business of all school meetings should be conducted according to the following rules of order :—

(1.) *Addressing Chairman.*—Every elector shall rise previously to speaking and address himself to the chairman.

(2.) *Order of speaking.*—When two or more electors arise at once, the chairman shall name the elector who shall speak first, when the other elector or electors shall next have the right to address the meeting in the order named by the chairman.

(3.) *Motion to be read.*—Any elector may require the question or motion under discussion to be read for his information at any time, but not so as to interrupt an elector who may be speaking.

(4.) *Speaking twice.*—No elector shall speak more than twice on the same question or amendment without leave of the meeting, except in explanation of something which may have been misunderstood, or until every one choosing to speak shall have spoken.

(5.) *Protest.*—No protest against an election, or other proceedings of the school meeting, shall be received by the chairman. All protests must be sent to the inspector within twenty days at least after the meeting.

(6) *Adjournment.*—A motion to adjourn a school meeting shall always be in order, provided that no second motion to the same effect shall be made until after some intermediate proceedings shall have been had.

(7.) *Motion to be in writing and seconded.*—A motion cannot be put from the chair, or debated, unless the same be seconded. If required by the chairman, all motions must be reduced to writing.

(8.) *Withdrawal of a motion.*—After a motion has been announced or read by the chairman, it shall be deemed to be in possession of the meeting; but may be withdrawn at any time before decision, by the consent of the meeting.

(9.) *Kind of motions to be received.*—When a motion is under debate no other motion shall be received, unless to amend it, or to postpone it, or for adjournment.

(10.) *Order of putting motion.*—All questions shall be put in the reverse order in which they are moved. Amendments shall be put before the main motion; the last amendment first, and so on.

(11.) *Reconsidering motion.*—A motion to reconsider a vote may be made by any elector at the same meeting; but no vote of reconsideration shall be taken more than once on the same question at the same meeting.

(12.) *Minutes.*—At the close of every annual or special meeting the chairman should sign the minutes, and send forthwith to the inspector a copy of the same, signed by himself and the secretary.

(13.) *Legal Trustee.*—Every trustee declared elected by the chairman of the school meeting is a legal trustee until his election is set aside by proper authority.

(14.) *Use of Seal.*—The seal of the school corporation should not be affixed to letters or notices, but only to contracts, agreements, deeds, or other papers, which are designed to bind the trustees as a corporation for the payment of money, or the performance of any specified act, duty or thing.

Instructions and Regulations.

109. Instructions may be issued by the Minister of Education from time to time to inspectors or other officers in carrying out the provisions of these regulations.

110. All former regulations of the Education Department are repealed, subject to such provisions for the years 1896 and 1897 as are contained in the Circular of Instructions issued by the Minister of Education on the date of the adoption of these regulations.

Schedule A.—Public School Courses of Study.

Form I.

Reading.—The use of the Tablets and Parts I. and II. of the First Reader.

Spelling.—Spelling from dictation and orally.

Writing.—Writing from blackboard copies.

Geography.—Conversations respecting the earth; its divisions of land and water; its plants and animals; explanation of any reference to places in the reading lessons.

English Language.—Oral exercises in language, correction of mistakes in conversation.

Arithmetic.—Notation and numeration to 1,000; addition and subtraction; mental arithmetic.

Drawing.—The exercises in first Reader and blackboard exercises.

Music.—Rote singing.

Form II.

Reading.—The Second Reader; easy questions on the literature of every lesson.

Spelling.—Oral spelling, and dictation on slates and paper; blackboard exercises.

Writing.—Copy books Nos. 1 and 2.

Geography.—Local geography and elementary definitions; map of the world; map geography of all places referred to in reading lessons.

English Language.—Oral and written exercises in language and composition; correction of mistakes in conversation.

Arithmetic.—Notation and numeration to 1,000,000; multiplication and division; mental arithmetic.

Physiology and Temperance.—Conversations on temperance, the use of alcoholic stimulants, and the laws of health.

Drawing.—Authorised Drawing Course, Nos. 1 and 2.

Music.—Rote singing, continued; easy notation.

Form III.

Reading.—The Third Reader; literature of every lesson.

Spelling.—Course in Form II. continued.

Writing.—Copy Books Nos. 3 and 4.

Geography.—Definitions; general geography of the Dominion of Canada; North and South America; Ontario more particularly; map drawing.

Grammar and Composition.—Classes of words and their inflections ; simple analysis ; descriptive and letter writing.

History.—Conversations on British and Canadian History ; local history.

Arithmetic.—Reduction ; compound rules ; bills and accounts ; averages and aggregates ; sharing and measurements ; mental arithmetic.

Physiology and Temperance.—Conversations on temperance ; the physical effects of intoxicating liquors ; importance of exercise.

Drawing.—Authorised Drawing Course, Nos. 3 and 4.

Music.—Easy exercises in musical notation ; songs.

Form IV.

Reading.—The Fourth Reader ; the literature of every lesson.

Spelling.—Systematic orthography and orthoëpy.

Writing.—Copy Books Nos. 5 and 6.

Geography.—Geography of Canada and the British Empire ; the continents ; map drawing.

Grammar and Composition.—Elements of formal grammar, analysis and composition. Descriptive, narrative and letter writing.

History.—Leading events in Canadian and British History, with special attention to Canadian History since 1841.

Arithmetic.—Measures, multiples, fractions, percentage, interest, mental arithmetic.

Physiology and Temperance.—Digestion, respiration, the circulation of the blood, and the nervous system. The effects of alcohol and narcotics.

Drawing.—Authorised Drawing Course Nos. 5 and 6.

Music.—Course in Form III., continued.

Form V.

Reading.—Practice in oral reading continued.

English Grammar and Rhetoric.—Etymology and Syntax, including the inflection, classification, and elementary analysis of words and the logical structure of the sentence ; rhetorical structure of the sentence and paragraph ; exercises chiefly on passages from authors not prescribed.

English Composition.—Essays on familiar subjects ; familiar letters.

English Poetical Literature.—Intelligent and appreciative comprehension of the prescribed texts ; memorisation of the finest passages ; supplementary reading from authors prescribed by the teacher ; oral reading of the texts. The examination in literature will consist of "sight work" as well as of questions on the prescribed texts.

History.—The History of Canada ; British History.

Geography.—The building up of the earth ; its land surface ; the ocean ; comparison of continents as to physical features, natural products and inhabitants ; relations of physical conditions to animal and vegetable products, and of national products and geographical condition to the occupations of the people and national progress. Form, size and motions of the earth; lines drawn on the map, with reasons for their position; relation of the positions of the earth with respect to the sun, to light and temperature; the air; its movements ; causes affecting climate. Natural and manufactured products of the countries of the world, with their exports and imports; trans-continental commercial highways and their relation to centres of population ; internal commercial highways of Canada and the chief internal commercial highways of the United States ; commercial relations of Great Britain and her colonies. Forms of governments in the countries of the world and their relation to civilisation.

Arithmetic and Mensuration.—Proofs of elementary rules in arithmetic; fractions (theory and proofs); commercial arithmetic; mental arithmetic; mensuration of rectilinear figures.

Algebra.—Elementary rules; highest common measure; lowest common multiple; fractions begun.

Geometry.—Euclid, Book I., propositions 1–26; easy deductions.

Drawing.—Object and model drawing; High School Drawing Course, Books Nos. 1 and 2.

Bookkeeping.—Bookkeeping by single and double entry; commercial forms, such as drafts, notes and cheques; general business transactions. The Bookkeeping shall be specially suitable for farmers and artisans, or for retail merchants and general traders.

*Botany.— The practical study of representatives of the following natural orders of flowering plants: Ranunculaceæ, Cruciferæ, Malvaceæ, Leguminosæ, Rosaceæ, Sapindaceæ, Umbelliferæ, Compositæ, Labiatæ, Capuliferæ, Araceæ, Liliaceæ, Iridaceæ, Coniferæ, and Gramineæ (types contained in text-book). Drawing and description of plants and their classification. Comparison of different organs, morphology of root, stem, leaves and hairs, parts of the flowers, germination, reproduction of flowering plants, pollination, fertilization, and the nature of fruits and seeds. In the examination a plant belonging to one of the above-mentioned orders to be selected by the presiding examiner shall be submitted to the candidates for description and classification.

*Agriculture.—The course in the authorized text book.

*Latin and Greek.—The Elementary Latin Book, Grammar Composition and sight reading. The Beginner's Greek Book begun.

*French and German.—Grammar, Composition and sight reading.

Schedule B. –High School Courses of Study.

Form I.

Reading.—Practice in Oral Reading.

English Grammar and Rhetoric.—Etymology and Syntax, including the inflection, classification, and elementary analysis of words and the logical structure of the sentence; rhetorical structure of the sentence and paragraph; exercises chiefly on passages from authors not prescribed.

English Composition.—Essays on familiar subjects; familiar letters.

English Poetical Literature.—Intelligent and appreciative comprehension of the prescribed texts; memorization of the finest passages; Supplementary Reading from authors provided in the High School library or supplied by pupils under the authority of the High School Board; oral reading of the texts. The examination will consist of "sight" work as well as of questions on the prescribed texts.

History.–The History of Canada; British History.

Geography.—The building up of the earth; its land surface; the ocean; comparison of continents as to physical features, natural products and inhabitants; relations of physical conditions to animal and vegetable products, and of natural products and geographical condition to the occupations of the people and national progress. Form, size and motions of the earth; lines drawn on the map, with reasons for their position; relation of the positions of the earth with respect to the sun, to light and temperature; the air; its movements; causes affecting climate. Natural and manufactured products of the countries of the world, with their exports and imports; transcontinental commercial highways and their relation to centres of population; internal commercial highways of Canada and the chief internal commercial highways of the United States; commercial relations of Great Britain and her colonies. Forms of governments in the countries of the world and their relation to civilization.

Arithmetic and Mensuration.—Proofs of elementary rules in Arithmetic; Fractions (theory and proofs); Commercial Arithmetic; Mental Arithmetic; Mensuration of rectilinear figures.

Algebra.—Elementary rules; Highest Common Measure; Lowest Common Multiple; Fractions begun.

Geometry.—Euclid, Book I., propositions 1–26; easy deductions.

Drawing.—Object and Model Drawing, High School Drawing Course, Books 1 and 2; * Perspective Drawing, Book 3.

*Bookkeeping.—Bookkeeping by single and double entry; commercial forms, such as drafts, notes and cheques; general business transactions. The bookkeeping shall be specially suitable for farmers and artisans, or for retail merchants and general traders.

*Stenography.—The elements of Pitman's system.

*Latin and Greek.—The Elementary Latin Book, grammar, composition and sight-reading. The Beginner's Greek Book begun.

*French and German.—Grammar, composition, conversation, dictation and sight-reading.

*Botany.—The practical study of representatives of the following natural orders of flowering plants:—Ranunculaceæ, Cruciferæ, Malvaceæ, Leguminosæ, Rosaceæ, Sapindaceæ, Umbelliferæ, Compositæ, Labiatæ, Cupuliferæ, Araceæ, Liliaceæ, Iridaceæ, Coniferæ and Gramineæ (types contained in text-book). Drawing and description of plants and their classification. Comparison of different organs, morphology of root, stem, leaves and hairs, parts of the flowers, germination reproduction of flowering plants, pollination, fertilization, and the nature of fruits and seeds. At the examination in Botany a plant belonging to one of the prescribed orders, to be selected by the presiding examiner, will be submitted to the candidates for description and classification.

Form II.

Reading.—The course in Form I. continued.

English Grammar and Rhetoric.—The course in Form I. continued, with the main facts in the development of the language.

English Composition.—The course in Form I. continued. For examination purposes an essay of about three pages of foolscap on one of the themes prescribed by the examiners will be required. The penmanship, spelling, punctuation, construction of sentences, the logical arrangement of the thought, the literary accuracy and aptness of the language, and the general plan or scope of the whole essay will be especially considered by the examiners.

English Poetical Literature.—The course in Form I. continued, with the prescribed texts. At the examination every candidate will be tested as to his familiarity with, and intelligent comprehension of the prescribed texts, and as to his knowledge from memory of the finest passages in prose and poetry. His ability to interpret literature for himself and his knowledge of English Literature generally will be tested by questions on a "sight" passage not contained in the text prescribed.

History.—Great Britain and Canada from 1763 to 1871, with the outlines of the preceding periods of British History. The Geography relating to the History prescribed.

Arithmetic and Mensuration.—Course in Arithmetic Form I. reviewed and completed. Mensuration; right parallelopipeds, pyramids and prisms; the circle, sphere, cylinder and cone.

Algebra.—The course in Form I. reviewed and completed, with simple equations of one, two and three unknown quantities; simple products.

Geometry.—Euclid, Book I.; deductions.

*Latin and Greek.—The course in Latin in Form I. continued, with the prescribed author. The Beginner's Greek Book, to page 301; sight trans-

lation. In Latin and Greek Grammar the examination questions in this Form shall be based mainly on prose passages. The sentences for translation into Latin and Greek shall be the same in idiom and vocabulary as in the text books; the sentences for translation into English shall consist of "sight" work and shall be of the same character as the sentences in the text books.

*French and German.—The course in Form I. continued, with the reader. In French and German Grammar the examination in Form II. shall be based mainly on prose passages; the sentences for translation into French or German shall be the same in idiom and vocabulary as in the authorised text books; the sentences for translation into English shall consist of "sight" work and shall be of the same character as the sentences in the authorised text books.

*Physics.—An experimental course defined as follows:—Metric system of weights and measures. Use of the balance. Phenomena of gravitation. Matter attracts matter. Laws of attraction. Cavendish experiment. Attraction independent of condition. Illustration of weight of gases, liquids and solids. Specific gravity. Meaning of the term "a form of matter." All matter may be subjected to transmutation. "Chemistry," application of measurement by weight (mass) to such transmutation leads to the theory of elements. Matter indestructible. Meaning of "Force." Various manifestations of force, with illustrations from the phenomena of electricity, magnetism and heat. Force measured in gravitation units; consequent double meaning of the terms expressing units of weight as mass and units of weight as force. Meaning of "work." Measurement of working gravitation units. Meaning of "Energy." Effects of force continuously applied to matter. Laws of matter in motion. Velocity; Acceleration. Statement of Newton's laws of motion. Definition of "Mass." Meaning, value and application of "g." Mass a measure of matter. Conservation of energy. Energy, like matter, indestructible and transmutable. Study of the states of matter. Properties and law of gases, liquids and solids. Laws of diffusion. Elementary laws of heat. Mechanical equivalent. Latent heat. Specific heat. Caloric.

*Bookkeeping.—Bookkeeping by single and double entry; business forms, usages and correspondence. The Principal and the Board of Trustees may arrange any other course in Bookkeeping that in their opinion is better adapted to the interests of the pupils taking up the subject.

*Stenography.—Course in Form I. continued.

Form III.

English Composition.—Essay-writing.

English Poetical Literature.—Course in Form II. continued, with the prescribed texts.

History.—Outlines of Roman History to the death of Augustus, and of Greek History to the Battle of Chaeronea. The geography relating to the history prescribed.

Algebra.—Course in Form II. reviewed; Square Root; Indices; Surds; quadratics of one or two unknown quantities.

Geometry.—Euclid; Books I., II., and III. Deductions.

Latin and Greek.—Course in Form II. continued; with the prescribed texts, The examination in Latin and Greek shall consist of translation into English of passages from prescribed texts; translation at sight (with the aid of vocabularies) of easy Attic prose and of passages from some easy Latin prose author; translation from English into Greek and Latin of sentences and of easy narrative passages based on the prescribed prose texts and such grammatical and other questions as arise naturally from the prescribed texts. Practice in the translation of Greek and Latin beyond the prescribed texts shall be expected of candidates.

French and German.—Course in Form II. continued; with the prescribed texts. In Form III. the examination in Grammar shall consist mainly of

translations into French or German of short English sentences as a test of the candidate's knowledge of grammatical forms and structure and the translation of passages from English into French or German and "sight" translation. Practice in French and German beyond the prescribed texts shall be expected of candidates.

Chemistry.—An experimental course defined as follows:—Properties of Hydrogen, Chlorine, Oxygen, Sulphur, Nitrogen, Carbon and their more important compounds. Nomenclature. Laws of combination of the elements. The Atomic Theory and Molecular Theory.

Physics.—ELECTRICITY.—Voltaic cells, common kinds; chemical action in the cell; magnetic effects of the current; chemical effects of the current; voltameter; astatic and tangent galvanometers; simple notions of potential; Ohm's law, with units; best arrangement of cells; electric light, arc and incandescent; magnetism; inclination and declination of compass; current induction; induction coil; dynamo and motor; electric bell; telegraph; telephone; electro-plating. SOUND.—Caused by vibrations; illustration of vibrations, pendulums, rods, strings, membranes, plates, columns of air; propagated by waves; its velocity; determination of velocity; pitch; standard forks, acoustical C = 512, musical, A = 870; intervals: harmonic scale; diatonic scale; equally tempered scale; vibration of air in open and closed tubes, with wave-lengths; resonators; nodes and loops; vibration of strings and wires; reflection of sound; manometric flames. LIGHT.—Rectilinear propagation; image through a pinhole; beam; pencil; photometry; shadow and grease-spot photometers; reflection and scattering of light; laws of reflection; images in plain mirrors; multiple images in inclined mirrors; concave and convex mirrors; drawing images; refraction; laws and index of refraction; total reflexion; path through a prism; lenses; drawing image produced by a lens; simple microscope; dispersion and colour; spectrum; recomposition of white light.

Botany.—The practical study of representatives of the flowering plants of the locality and representatives of the chief sub-divisions of cryptogams, such as a fern, a lycopod, a horse-tail, a liverwort, a moss, a lichen, a mushroom and a chara. The drawing and description of parts of plants and classification. Comparison of different organs, morphology of root, stem, leaves and hair, parts of the flower, reproduction of flowering plants, pollination, fertilisation and the nature of fruit and seeds. At the examination two plants to be selected by the presiding examiner will be submitted, one for classification and one for description. In classification candidates will be allowed to use their floras (the authorised text-book in Botany).

Form IV.

English Composition.—Course in Form III. continued.

English Poetical Literature.—Course in Form III. continued, with the prescribed texts. The examination questions will test within reasonable limits the power of appreciating literary art.

History.—English History from the discovery of America to 1763. Ancient History, the course in Form III. reviewed. The geography relating to the History prescribed.

Algebra.—Course in Form III. reviewed. Theory of Divisors; Ratio, Proportion and Variation; Progressions; Notation; Permutations and Combinations; Binomial Theorem; Interest Forms; Annuities.

Geometry.—Euclid. The course in Forms II. and III. reviewed; Books IV. and VI.; Definitions of Book V.; Deductions.

Trigonometry.—Trigonometrical ratios, with their relations to each other; Sines, etc., of the sum and difference of angles with deduced formulas; Use of Logarithms; Solution of Triangles; Expressions for the area of triangles; Radii of circumscribed, inscribed and escribed circles.

Latin and Greek.—Course in Form III. continued, with the prescribed texts. In Form IV the examination in Latin and Greek shall be of an

advanced character and shall include the translation into Latin and Greek of ordinary narrative passages of English. The Roman method of pronouncing Latin is recommended.

French and German.—Course in Form III. continued, with the prescribed texts. The course of study in Form IV. in grammar, composition, and sight translation shall be the same as in Form III., but the examination shall be of a more advanced character.

Physics.—An experimental course defined as follows :—MECHANICS.—Uniformly accelerated rectilineal motion, particularly under gravity; composition and resolution of forces; triangle and parallelogram of forces; friction; polygon of forces; with easy examples. HYDROSTATICS.—Fluid pressure at a point; pressure on a horizontal plane; pressure on an inclined plane; resultant vertical pressure, and resultant horizontal pressure, when fluid is under air pressure and when not; transmission of pressure; Bramah's press; equilibrium of liquids of unequal density in a bent tube; the barometer; air pump; water pump, common and force; siphon. ELECTRICITY.—Voltaic cells, common kinds; chemical action in the cell; magnetic effects of the current; chemical effects of the current voltameter; astatic and tangent galvanometers; simple notions of potential; Ohm's law, with units, best arrangement of cells; electric light, arc and incandescent; magnetism; inclination and declination of compass; current induction; induction coil; dynamo and motor; electric bell; telegraph; telephone; electro-plating. SOUND.—Caused by vibrations; illustration of vibrations, pendulums, rods, strings, membranes, plates, columns of air; propagated by waves; its velocity; determination of velocity; pitch; standard forks; acoustical C=512, musical A=870; intervals; harmonic scale; diatonic scale; equally tempered scale; vibration of air in open and closed tubes, with wave lengths; resonators; nodes and loops; vibration of strings and wires; reflection of sound; manometric flames. LIGHT.—Rectilinear propagation; image through a pin-hole; beam; pencil; photometry; shadow and grease-spot photometers; reflection and scattering of light; laws of reflection; images in plain mirrors; multiple images in inclined mirrors; concave and convex mirrors; drawing images; refraction; laws and index of refraction; total reflection; path through a prism; lenses; drawing image produced by a lens; simple microscope; dispersion and colour; spectrum; recomposition of white light.

Chemistry.—Chemical theory. The practical study of the following elements, with their most characteristic compounds, in illustration of Mendelejeff's classification of the elements. Hydrogen; Sodium; Potassium; Magnesium, Zinc; Calcium; Strontium; Barium; Boron, Aluminum; Carbon, Silicon, Tin, Lead; Nitrogen; Phosphorus; Arsenic; Antimony; Bismuth; Oxygen, Sulphur; Fluorine, Chlorine, Bromine, Iodine; Manganese, Iron. Elementary Qualitative Analysis. At the examination in Practical Chemistry for Form IV. the material for determination shall be sent from the Education Department, and shall consist of one pure simple salt. In the qualitative analysis of this salt the candidates shall not be allowed the use of text-books, analytical tables, notes, or charts. Places shall be allotted to the candidates so that each one shall be at least ten feet away from any other candidate. Each candidate shall have exclusive use of one set of reagents, apparatus and lamp, while at work. If the number of candidates should exceed the accommodations of the laboratory, the candidates shall be examined in sections.

Biology.—ELEMENTS OF ZOOLOGY.—Thorough examination of the external form, the gills and the viscera of some common fish. Study of the prepared skeleton of the same. Demonstration of the arrangement of the muscular and nervous systems and the sense organs, as far as these can be studied without the aid of a microscope. Comparison of the structure of the frog with that of the fish. The skeleton of the pectoral and pelvic girdles, and of the appendages of the frog, and the observation of the chief facts in the development of its spawn, till the the adult form is attained. Examination of the external from of a turtle and a snake. Examination of the structure of a pigeon or a fowl. Study of the skeleton and also of the teeth and viscera of a cat or dog. Study of the crayfish as a type of the Arthropode

Comparison of the crayfish with an insect (grasshopper, cricket, or cockroach), also with a millipede and a spider. Examination of an earthworm and a leech. Study of a fresh-water mussel and a pond snail. The principles of zoological nomenclature as illustrated by some of the common fresh-water fish, such as the sucker and herring, bass and perch. Study of an amœba or paramœcium as a type of a unicellular animal. The modifications of the form of the body in vertebrates in connection with different methods of locomotion. ELEMENTS OF BOTANY.—The practical study of representatives of the flowering plants of the locality in which the school is situated, and representatives of the chief sub-divisions of cryptogams, such as a fern, a lycopod, a horsetail, a liverwort, a moss, a lichen, a mushroom, and a chara. An elementary knowledge of the microscopic structure of the bean and the maize. The drawing and description of parts of plants and classification. Comparison of different organs, morphology of root, stem, leaves, and hair, parts of the flower, reproduction of flowering plants, pollination, fertilisation, and the nature of fruit and seeds. The material for examination will consist of two plants, a microscopic section and an animal. The plant designated "A" is to be identified by means of the flora. Twenty minutes shall be allowed for this operation. The text-books shall then be taken from the candidates and the paper with the plant designated "B," the animal and the microscopic section distributed. Each candidate is to be allowed the use of a compound microscope during the second period. The material for this examination will be sent from the Education Department.

COMMERCIAL DIPLOMA COURSE.

The course shall consist of bookkeeping, business forms and usages and stenography. Bookkeeping shall be taken in six sets as follows :—

Set I. shall show transactions extending over a period of two months, the transactions of the first month being done by Single Entry, and of the second by Double Entry, and showing the change from Single to Double Entry. Books to be used : Day Book (first month), Journal Day Book (second month), Cash Book, Bill Book, and Ledger.

Set II. The transactions shall be the same as for Set I., those of the first month being done by double entry, and of the second month by Single Entry, and showing the change from Double Entry to Single Entry. Books to be used : Four Column Journal with special columns for Mdse. Purchases and Sales (first month), Day Book (second month), Cash Book, Bil. Book and Ledger.

Set III. A Double Entry set with two partners. Books to be used : Journal Day Book with a special column for Mdse. Sales, Cash Book, Invoice Book, Bill Book, and Ledger, the first three as Books of original entry.

Set IV. A Double Entry set ; a continuation of Set III., the posting being done in the same Ledger. A third partner shall be admitted and the transactions shall include shipments and consignments. Books to be used : Journal Day Book, Cash Book, Invoice Book, Sales Book, Bill Book, and Ledger, the first four as books of original entry.

Set V. A Double Entry set ; a continuation of Set IV., the posting being done in a new ledger. A fourth partner shall be admitted, and the transactions shall include wholesale merchandising, shipment companies, and merchandise companies. Books to be used : The same as for Set IV.

Set VI. A set in Manufacturing. Books to be used : Journal Day Book, with a special column for Mdse. Sales, Cash Book, Time Book and Ledger.

The Cash Book shall be a book of original entry in all of the Double Entry Sets, various special columns being used in the different sets. A monthly Trial Balance shall be made in connection with Sets III., IV., and V., and Statements of Resources and Liabilities, and of Losses and Gains for all of the sets. The transactions in the different sets shall be different from year to year. The sets may recur triennially, and shall consist of not less than twenty pages of foolscap.

The bookkeeping sets of pupils who write at the examination for a commercial certificate shall be sent, prepaid, to the Education Department, with the examination papers and shall be certified by the teacher to be the work of the candidate.

Business Forms and Usages.—Negotiable paper; promissory notes; special notes; bills of exchange; acceptance; negotiation of bills, notes; cheques; collection of accounts, discharge and dishonour; special forms of due bills and orders; accounts, invoices and statements; interest; partnerships; receipts and releases; banking; and commercial correspondence.

Stenography.—At the examination in dictation in stenography, the candidate shall be required to have attained the rate of fifty words per minute. He shall also be required to transcribe his work into longhand at the rate of twelve words per minute. The dictated matter shall consist of business letters and legal documents.

Schedule C.—Course for Commercial Specialists.

Bookkeeping.—Single and Double entry bookkeeping; wholesale and retail merchandising, commission business, manufacturing, warehousing, steamboating, exchange, joint stock companies, municipalities, societies and public institutions; statements and balance sheets, partnership adjustments, liquidation and administration of estates, auditing filing papers, the use of special columns, and the various other expedients in bookkeeping to save time and labour, and secure accuracy of work.

Penmanship.—Theory and practice of penmanship, Spencerian and vertical; ledger headings; marking and engrossing.

Commercial Arithmetic.—Interest, discount, annuities certain, sinking funds, formation of interest and annuity tables, application of logarithms, stocks and investments, partnership settlements, partial payments, equation of payments, and exchange.

Banking.—Money and its substitutes; exchange; incorporation and organization of banks; business of banks, their relation to each other and to the business community; the clearing house system; legal requirements as to capital, shares, reserves, dividends, not issue; insolvency and consequent liability.

Business Forms.—Invoices, accounts, statements, due bills, orders, receipts, warehouse receipts, deposit receipts, deposit slips, bank pass books, promissory notes, bills of exchange, bank drafts, cheques, bonds, debentures, coupons, instalment scrips, stock certificates, stock transfers, proxies, letters of credit, affidavits, balance sheets, pay sheets, time sheets, and special forms of general bookkeeping, books to suit special cases.

Laws of Business.—Contracts; statute of limitations; negotiable paper and endorsements; sales of personal property; accounts, invoices, statements, etc.; chattel mortgages; real estate and mortgages; interest; agency; partnership; corporations; guarantee and suretyship; receipts and releases; insurance; master and servant; landlord and tenant; bailment; shipping and transportation; host and guest; telegraphs; auctions - patents; copyrights; trade marks and industrial designs; affidavits and declarations; subjects and aliens; wills, and joint stock companies.

Stenography.—The principles of Stenography; writing from dictation at a speed of sixty words per minute, and accurate transcription into longhand at a speed of twelve words per minute; the dictated matter to comprise business correspondence or legal documents.

Drawing.—Object and Model Drawing; Perspective and Geometrical Drawing.

APPENDIX B.—CERTAIN REGULATIONS AS AMENDED IN 1898 AND 1899.

For the academic year 1898-99 the following modifications were made in the Revised Regulations, which came into force in October, 1896 :—

Public School Leaving Examination.

This examination will be conducted in 1899 on the course of study prescribed in the regulations, except that physiology and temperance, will as in 1898, be substituted for botany. High school pupils are not eligible to write at this examination. The examination will be conducted by the Entrance Board of Examiners, under the provisions of Section 38 of the High Schools Act, and Sections 23-29 of the Regulations, subject to the usual instructions to examiners.

First Form Examination.

This examination, which is open to all pupils, will be conducted as heretofore, the course embracing reading, writing and bookkeeping, drawing, geography, and botany. First Form certificates will have the same qualifying value for teachers' certificates as public school leaving certificates.

Primary Examination.

No examination will be held in Part II. of Form II. (Regulation 43), and no certificates that give mere primary standing (Regulations 45, 48 and 49) will be issued after 1898. No change is made in the course to be taken up in Forms I. and II. of the high school or for continuation classes in public schools, by the abolition of the primary examination.

Junior Leaving Examination.

The amendment of Regulation 46 made for 1898 is continued. This will allow, at the Form III. examination for junior leaving standing, the following options :—(*a*) French and Greek ; (*b*) German and Greek ; (*c*) French, German, and Chemistry ; (*d*) French, Physics, and Chemistry ; (*e*) German, Physics, and Chemistry ; (*f*) Botany, Physics and Chemistry.

The obligatory subjects of Form III. for junior leaving are as already prescribed—viz., English Composition, English Literature, Ancient History, Algebra, Geometry, and Latin.

Unsuccessful candidates at the junior leaving examination will be allowed to write in 1899 for junior leaving standing, by selecting the same options in the course as were allowed in 1898.

Senior Leaving Examination.

The amendment of Regulation 47 made for 1898 is continued. This will allow, at the Form IV. examination for senior leaving standing, the following options :—(*a*) French and Greek ; (*b*) German and Greek ; (*c*) French and German ; (*d*) French and Chemistry ; (*e*) German and Chemistry ; (*f*) Biology and Chemistry.

The obligatory subjects of Form IV. for senior leaving are as already prescribed—viz., English Composition, English Literature, Algebra, Geometry, Trigonometry, English and Ancient History, Physics and Latin.

Unsuccessful candidates at the senior leaving examination will be allowed to write in 1899 for senior leaving standing by selecting the same options in the course as were allowed in 1898.

Percentage, &c

Candidates for junior and senior leaving standing will be required o make 50 per cent. of the aggregate marks allowed in the subjects prescribed in each of the forms or parts of forms, as well as one-third in each paper ; 67 per cent. of the aggregate of each form examination will be required for honours in that form. The examinations in chemistry, physics, and biology in Forms III. and IV. will be equal in difficulty, as near as may be, to the examination in the language or languages for which these subjects are taken as options ; and so far as necessary, the maximum marks in each of these subjects will be adjusted for the purpose. There will be two papers in biology of Form IV. ; one in botany and one in zoology, with practical work distributed between the two. The time limit for those subjects will be extended.

These modifications, it will be understood make no change in the course or the percentage required by the University for matriculation.

County Model Schools.

(1898.)—The abolition of the primary examination will not affect the rights of holders of primary standing obtained in 1898, or in a previous year, to attend county model schools. If a scarcity of teachers should arise in any county after next year, in consequence of the higher requirements, provision will be made to meet the special conditions of the locality. It should be understood that County Boards of Examiners are not allowed to award third-class certificates to candidates who do not make the higher percentage required by Regulation 63. A district certificate shall not be granted under this section of the Regulations unless there is scarcity of teachers, and until the consent of the Department has been first obtained. Renewals, granted under Regulation 87, are valid only in the county where issued.

Beginning with the examinations of the Model Schools in 1900, an additional paper in Methods will be submitted to test the ability of the students-in-training to teach drawing, writing, bookkeeping, and elementary science (botany or agriculture). There will also be an examination in reading.

Normal College.

All students entering the Normal College, irrespective of the academic course which they may have taken, must take the subjects prescribed (*see* Appendix A., Regulation 80), subject to the following conditions :—

(1.) Holders of senior leaving certificates, granted on departmental examinations, may omit Latin if they do not select Greek.

(2.) Unsuccessful candidates at previous examinations will be allowed to write at the final examination in May of any year without attendance at the Normal College, and may confine themselves to the same subjects as taken previously.

Teachers of ten years successful experience, who hold normal school certificates, and who have the necessary academic standing, may write at the final examination in May without attendance at the Normal College.

Beginning with the examinations of the Model School in 1900 an additional paper in methods will be submitted to test the ability of the students-in-training to teach Drawing, Writing, Bookkeeping, and Elementary Science (Botany or Agriculture). There will also be an examination in Reading,

APPENDIX C.—DUTIES OF INSPECTORS.

The Duties of County Inspectors.

It is the duty of a County Inspector :

1. To visit every Public School within his jurisdiction once in each term, unless required to do so oftener (for the adjustment of disputes or other purposes) by the county council which appointed him, and to see that every school is conducted according to this Act and the regulations of the Department ;

2. To examine, at his visits of inspection, into the condition of the school as respects the progress of the pupils in learning ; the order and discipline observed ; the system of instruction pursued ; the mode of keeping the school registers ; the average attendance of pupils ; the character and condition of the building and premises ; and to give such advice to the teachers, pupils and officers of the school as he may consider proper ;

3. To deliver from time to time, public lectures in his district on some subject connected with public school education ;

4. To withhold his order for the amount apportioned from the legislative or municipal grant to any school section ; (*a*) When the school was kept open for less than six months in the year ; or (*b*) When the trustees fail to transmit the annual or semi-annual school returns properly filled up ; or (*c*) When the trustees fail to comply with the school Act, or the regulations of the Education Department ; or (*d*) When the teacher uses, or permits to be used, as a text book any book not authorised by the Education Department ; and in every case to report to the trustees and to the Education Department his reasons for so doing ;

5. To give when desired any information in his power to the Minister of Education respecting any Public School matter within his jurisdiction, to prepare and transmit to the Minister of Education, on or before the 1st day of March, an annual report in the form prescribed by the Education Department

7. To recommend to the county or township council such special aid as he may deem advisable to be given to new or weak school sections in the county ;

8. To appoint, in his discretion, the time and place for a special meeting ;

9. To give, at his discretion, any candidate, on due examination, a certificate of qualification to teach a school within his district until the next ensuing professional examination of teachers ;

10. To deliver over to his successor, on retiring from office, copies of his official correspondence, and all school papers in his custody, on the order of the county council or public school board appointing him.

The Act also provides :—

No Inspector of schools shall, during his tenure of office, engage in or hold any other employment, office or calling which would interfere with the full discharge of his duties as Inspector.

In addition to these provisions of the statute the following regulations are prescribed.

It is the duty of every County Inspector :—

(1) *To spend at least half a day each term in each school.* Where a school has several departments, the Inspector should devote half a day to each department. When, however, from the character of the work done, an Inspector thinks it would be in the interest of the school to extend his visit over the whole day, he should do so.

(2) *To satisfy himself as to the progress made by the pupils from time to time.* This cannot be done without many memoranda of the standing of each class. It will therefore be necessary for the Inspector to make

copious notes in regard to each recitation, showing the condition of each class and the proficiency attained in the several subjects of the curriculum. This part of the work should be thorough and searching; and the conclusions arrived at should be based on the Inspector's own observation.

(3) *To examine into the methods of instruction pursued by the teacher.* To do this the Inspector should require the teacher of the school to teach several lessons in his presence. In this way the teacher's methods can be observed and hints given for improvement, should he evince any faults of method or of manner. Great attention should be paid to methods; the proper and logical presentation of a subject is so important that success is impossible without it. He should see that the prescribed time for instruction in Temperance and Hygiene is observed.

(4) *To teach a few model lessons himself.* The proper methods of teaching subjects that are found to be neglected or badly taught by the teacher should be exemplified by the Inspector. Here all the qualities which go to form the model teacher should be exercised. His methods of questioning and of receiving answers, of arousing the enthusiasm of the class, of securing attention, of reaching by apt illustration the judgment of the pupils, should serve the teacher both as a model and as a stimulus.

(5) *To ascertain the nature of the discipline exercised by the teacher.* This no doubt will appear from the attention and diligence of the pupils, without special enquiry. The *manner* of the teacher will very soon indicate the nature of the discipline. It would be well, nevertheless, to ascertain whether corporal punishment is frequently resorted to, and if not, what are the punishments (if any) usually inflicted.

(6) *To examine the registers, maps, seats and all the internal and external equipment of the school-house.* He should see (*a*) that the register and class book are properly and neatly kept, and ascertain whether or not entries are made therein daily; (*b*) that the maps are suitable and well preserved; (*c*) that blackboards are in proper repair, and that crayons and brushes are fully supplied; (*d*) that the furniture is generally adequate; (*e*) that proper attention is paid to the heating and ventilation of the rooms; (*f*) that the fences and out-houses are in proper repair; (*g*) that the School Library is suitably cared for.

(7) *To report to Trustees in regard to such matters as require their attention.* This duty the Inspector should never neglect. The trustees of a school expect to be informed and directed as to many matters coming under the cognizance of the Inspector, who is, in a certain sense, their officer, and is appointed for the very purpose of aiding them in the discharge of their duties. His report, therefore, on the school should be full. Every necessary change coming within the scope of the duties of the trustees should be mentioned in detail; and in no case should the school grant be withheld until they have had an opportunity of removing any defect to which their attention has been called.

(8) *To give such advice to teachers as may be deemed necessary.* This part of the Inspector's duty should be performed with tact and delicacy, and perfect frankness. Whatever defects in the teacher's manner, or in his discipline of the pupils, or methods of instruction, are discovered during the inspection of the school, should be plainly pointed out. Wherever the Inspector has reason to believe that there is any defect in the organization of the school, or in its classification, or in attention on the part of the pupils, it should be referred to, and the proper remedy suggested. This, of course, should be done privately—not in the presence of the pupils.

(9) *To see that no unauthorized text-books are used in the school.* No text-books should be placed in the hands of the pupils except those authorised for their use. Under the disguise of being books for "home study," many unauthorised text books are introduced into the school. This should be prevented by the Inspector in the exercise of his authority as an officer of the Education Department.

(10) *To withhold the school grant in certain cases.* Before the school grant is withheld: (*a*) An opportunity should be afforded the Board of Trustees

to remedy the wrong complained of. (*b*) A full statement of the case should be sent to the Department, and the consent of the Minister of Education obtained. As the grant can be withheld for any violation of the School Act or Departmental Regulations, the power thus conferred should be exercised judiciously, and only when other remedies fail.

(11) *To divide the school grants.* Care should be taken to see that the semi-annual returns of the Boards of Trustees are properly added up, and if any doubt exists as to their accuracy they should be compared with the school register. When the division of the grant is made, as required by law, it will be sufficient for the Inspector to send a statement to the Township Treasurer of the amount due each school section, and at the same time to notify the Secretary-Treasurer of each Board of Trustees of the amount due its section. The Board of Trustees can then give an order either to the teacher or to some other person to whom it desires to have the money paid, and on this order the Township Treasurer is authorised to pay the money.

(12) *To decide complaints made within twenty days in regard to the election of Trustees and other matters.* In discharging this duty the Inspector should remember that he is exercising judicial functions, and should accordingly proceed with due deliberation. He has a right to withhold his decision until such evidence is produced as he may deem necessary in regard to the question at issue.

(13) *To grant, on examination, temporary certificates.* These certificates should be granted only (*a*) when petitioned for by a Board of Trustees, and only for the school over which such Board has jurisdiction; and (*b*) until the date of the next ensuing Departmental Examination; and (*c*) when it appears that a teacher holding a regular certificate is not available. The consent of the Minister of Education is also necessary in every case.

(14) *To suspend a teacher's certificate.* This should be done only when the Inspector is fully satisfied that the teacher is incompetent or immoral, or has wilfully violated the School Law or the regulations of the Education Department. In the final investigation by which such suspension is to be confirmed or set aside, the fullest opportunity should be afforded the teacher to vindicate himself. Judicial fairness should in this instance also characterise the conduct of the Inspector.

(15) *To visit the County Model School at least twice in each term.* It is very desirable that the Inspector should be present at the opening of the Model School, and assist the Principal in its organisation. He should also visit the school during the term, and by his presence and counsel encourage the teachers-in-training in the pursuit of their studies. For two such visits he should be paid by the county council at the same rate as he is paid for Public School inspection.

(16) *To examine carefully in English* every pupil according to the course of studies prescribed for Public Schools; but he shall be at liberty to use his own discretion as to what explanations he will give in any other language that appears to be better known by the pupil. The standard of efficiency recognised in Public Schools where the English language only is taught shall be the standard for French and German schools, reasonable allowance being made for pupils whose mother tongue is French or German. The Inspector shall report at once to the Education Department any school in which the regulations respecting the study and use of English are disregarded by the teacher or trustees.

Duties of City and Town Inspectors.

Inspectors in cities and towns shall perform similar duties as County Inspectors so far as practicable, and shall, in addition, perform such other duties as may be prescribed by the Board of Trustees. In cities with more Inspectors than one, each Inspector may be required to report separately to the Education Department.

Duties of Separate School Inspectors.

Inspectors of separate schools shall perform the like duties as Inspectors of public schools, and shall, with regard to separate schools, have, so far as the same is practicable, like power and authority as public school Inspectors have with regard to public schools.

Duties of Model School Inspectors.

The Inspector of model schools shall visit each model school at least once in two years, and shall devote a full day to the examination of the teachers-in-training and the inspection of the departments used for model school purposes, and shall report annually to the Minister of Education one the standing of each model school and all other matters affecting the efficiency of the schools.

Duties of High School Inspectors.

(1) Each high school Inspector shall visit the high schools and collegiate institutes in the section of the Province assigned to him at least once in each year, and shall spend not less than one day in each school having two or three masters, and such additional time in a school with four or over four masters as the interests of the school may require.

(2) At each visit he shall ascertain the character of the teaching in the different departments of study; and shall make enquiry and examination, in such manner as he may think proper, into the efficiency of the staff, the accommodation and equipment of the school, and all matters affecting the health and comfort of the pupils. He shall also report any violation of the High Schools Act or the Regulations of the Education Department in reference to high schools, after making such enquiry as he may think proper.

(3) He shall report to the Minister of Education, within one week after his inspection, the result of his observations and enquiry in a form prescribed for that purpose.

Powers of Inspector.

The Inspector, while officially visiting a school, has supreme authority in the school, and has the right to direct teachers and pupils in regard to any or all of the exercises of the schoolroom. He may either examine the classes himself or direct the teachers to do so. He is at liberty to give such advice to pupils or to the teacher as he may deem necessary. All his counsels, however, should be given in a spirit of kindness, and his authority should be exercised, not with a view to over-awe or intimidate, but to reform abuses, correct mistakes, and inspire confidence and respect. He should be courteous and considerate, and when reproof is necessary it should be tempered with gentleness and sympathy.

APPENDIX D.

EXAMINATIONS AND EXAMINERS.

(1) Examinations will be held annually at each high school and collegiate institute, and at such other places as the Minister of Education may designate, in the courses of study prescribed for each of the Forms I. and II., III. and IV. These examinations shall be known respectively as the High School Primary, the High School Junior and Senior Leaving Examinations, and the University Pass and Honour Matriculation Examinations.

(2) The Minister of Education may act in conjunction with the Senate of the University of Toronto in conducting these examinations by means of a Joint Board of the Education Department and University of Toronto, to be appointed as soon after the first day of October in each year as is practicable.

(3) The Joint Board shall elect a chairman from their number who shall retain his right to vote as a member of the Board. In case of any vacancy on the Board the appointing body may fill the same for the remainder of the term.

(4) The Board shall appoint examiners to prepare the examination papers for the Departmental and university matriculation examinations, but such examiners shall not exceed fifteen in number. The Board shall also appoint such associate examiners as may be necessary for the reading of the answer papers of the candidates at the said examinations.

(5) The examiners shall be selected from persons qualified by experience as teachers in either a university or a high school to set papers suitable for candidates at such examinations.

(6) The associate examiners shall be selected from a list of graduates of universities in the British Dominions actually engaged in teaching, such list to be furnished by the Minister of Education, and to contain the names of at least double the number of associate examiners required.

(7) No examiner or associate examiner shall be appointed who is objected to by three out of the four representatives either of the university or of the Department of Education.

Duties of Examiners.

The following shall be the duties of the examiners :–

(1) To elect at the first meeting a chairman from their number, who shall retain his right to vote as a member of the Board.

(2) To assign at the first meeting the subjects of examination to the different members, and to arrange for having the manuscript of the examination papers in the hands of the Minister of Education at such dates as he may fix.

(3) To revise and approve of all examination papers and to assign values to the questions. The examiners are jointly and severally responsible for the character of the questions in each of the papers.

(4) To arrange in alphabetical order the names of the examiners in each department at the head of each paper in that department, and to give, as far as possible, instructions to candidates in the same form at the head of each paper.

(5) To avoid, as far as possible, questions that consist of numerous parts with different values for each part.

(6) To use capital letters, A, B, etc., to denote the sections of the papers, and figures 1, 2, etc., consecutively throughout, to mark the individual questions. To space in printing and to mark with letters (*a*), (*b*), etc., the several sub-sections under each number.

(7) To place, as far as the nature of the paper allows, optional questions, if any, at the end of the paper.

(8) To take the general management of the work of the associate examiners, and to settle such questions connected therewith as may be referred to them by the chairmen of the sections.

(9) To assist the associate examiners in each section in reading the answer papers and to report to the Minister of Education and Joint Board the results of the examinations.

(10) To settle the results of the examinations in accordance with the standards and regulations of the Education Department and the Senate of the University respectively

(11) To decide and report upon all appeals in conjunction with such persons as may be appointed for that purpose.

Duties of Associate Examiners.

(1) The associate examiners shall be classified into sections according to the subject of examination. An examiner shall be the chairman of each section, or, where an examiner is unable to act, such person as may be appointed for that purpose by the Joint Board.

(2) The chairman of a section shall have general oversight of the work done thereby, and shall spend so much of his time as may be necessary in revising the work of his colleagues, with a view to remove clerical errors and secure practical uniformity in valuing the answers.

(3) Before commencing the actual work of examination the associate examiners of each section shall spend a sufficient time in discussing the answers and reading answer papers jointly, to enable the members to arrive at a consensus of opinion as to the valuation of answers, especially of partial or imperfect answers.

(4) When a section finds that the values assigned to the questions on the examination papers are unsatisfactory, or when it is evident that the examiner has not followed the course of study prescribed by the Education Department or by the curriculum of the University of Toronto, it shall report through its chairman to the chairman of the Examiners or the person acting on his behalf.

(5) No associate examiner shall have in hand more than twenty papers at one time, nor shall he have more than one envelope opened upon his table at one time, except in cases of suspected copying, in which case he shall return each sheet to its proper envelope. The papers shall be returned in the numerical order in which they were received. In cases of suspected copying, the associate examiner shall note on the face of the envelope "Copying, see No. ———, question ———."

(6) One mark shall be deducted for each misspelt word and for each instance of bad English from the marks obtained in each subject. At the Primary and the Junior Leaving Examination in English Composition, an essay will be expected of about sixty lines in length, and at the Senior Leaving Examination of about ninety lines.

(7) At all the examinations in Arithmetic, either arithmetical or algebraic solutions shall be accepted.

(8) In reading the papers each associate examiner shall mark distinctly in the left-hand margin the value assigned by him to each answer or partial answer, shall sum up the total on each page at the foot of the margin, and shall place the result on the face of the envelope, indicating the deductions for misspelt words and incorrect English thereon, thus, *e.g.*, History 80—2 sp.—4 f.s. = 74, and initialing the envelope of each paper examined.

(9) The hours of work shall be from 9 o'clock a.m. to 12 noon, and from 2 o'clock p.m. to 5 p.m. Examiners shall begin and stop work promptly, and shall abstain from all unnecessary conversation during working hours. The work of the examination shall be strictly confidential.

(10) Associate examiners shall be paid the sum of 6 dollars per day, the payment being subject to the restriction that the whole amount paid for the examination shall not exceed the sum of 1.50 dollar per candidate.

(11) Associate examiners who do not reside in Toronto will be allowed their actual railway expenses to and from their usual residences in Ontario.

Examination Papers.

(1) At all the examinations, each paper on the Latin, Greek, French, and German authors shall contain, in addition to questions on passages from the prescribed texts, questions on passages from works not prescribed but similar in style and of equal difficulty; and the meaning shall be given of

words not likely to have been met with by the candidates. The examinations in the "Sight-work" shall determine, not whether the candidate has read more than the prescribed texts, but whether he is familiar with the idioms and constructions met in the prescribed course.

(2) At the Primary and Junior and Senior Leaving Examinations in Poetical Literature, "Sight-work" shall also be given; but at the Leaving examinations the examination papers shall consist of three sections, two being on the prescribed texts, and the third on an "unseen" passage; of these, university candidates shall take the first and second, and departmental candidates the third, with one of the others prescribed by the examiners.

(3) In the subjects of Mathematics, English, and History and Geography the papers for pass matriculants either shall be distinct from those for the Junior Leaving Examination, or shall be supplemented by questions specially adapted to the latter class of candidates.

(4) At the Primary and Junior Leaving Examinations the value of the questions on Grammar, in the paper on Grammar and Rhetoric shall be two-thirds of the value of the whole, and at the Primary examination the value of the questions in Algebra in the paper on Algebra and Euclid shall also be two-thirds of the value of the whole. The questions in Mensuration are for the Junior Leaving Examination only.

(5) At the Senior Leaving and Honour Matriculation Examinations in Botany and Zoology, the specimens for description and identification shall be sent from the Education Department where required, and at the primary examination in Botany they shall be provided by the presiding examiner.

(6) The subjects, number, and values of the papers of the different examinations shall be as follows:—

1. *Primary Examination.*

	No. of papers.	Value of subject.
English Grammar and Rhetoric	One	200
English Composition (Essay)	„	100
English Poetical Literature	„	200
History and Geography	„	150
Arithmetic, Mensuration, and Commercial Transactions	„	200
Algebra and Euclid	„	200
Physics	„	100
Botany	„	100
Latin	Two—one on Authors and one on Composition and Grammar.	200
French	„	200
Grammar	„	200

2. *Junior Leaving Examination.*

	No. of papers.	Value of subject.
English Grammar and Rhetoric	One	150
English Composition (Essay)	„	100
English Poetical Literature	„	200
History and Geography	„	150
Arithmetic and Mensuration	„	200
Algebra	„	150
Euclid	„	150
Chemistry	„	200
Physics	„	200
Latin	Two—one on Authors and one on Composition and Grammar.	200
French	„	200
German	„	200
Greek	„	200

3. *Senior Leaving Examination.*

	No. of papers.	Value subject.
English Grammar, Philology, Rhetoric, and Prosody	One	200
English Composition (Essay)	„	100
English Poetical Literature	„	200
History and Geography	„	150
Algebra	„	150
Euclid	„	150
Trigonometry	„	150
Chemistry	Four	125
Physics		125
Botany		75
Zoology		75
Latin	Two—one on Authors and one on Composition and Grammar.	200
Greek	„ „	200
French	„ „	200
German	„	200

APPENDIX E.—UNIFORM TEXT BOOKS.*

Provincial Control.

An important characteristic of the system of education for Ontario is the adoption of a uniform series of text-books for the schools of the Province. The statutes for both High and Public Schools provide :—

No teacher shall use or permit to be used as text-books any books in a model or public school, except such as are authorised by the Education Department, and no portion of the legislative grant shall be paid by the inspector to any school in which unauthorised books are used.

Any authorised text-book in actual use in any public or model school may be changed by the teacher of such school for any other authorised text-book in the same subject on the written approval of the trustees and the inspector, provided always such change is made at the beginning of a school term, and at least six months after such approval has been given.

In case any teacher or other person shall negligently or wilfully substitute any unauthorised text-book in place of an authorised text-book in actual use upon the same subject in his school, he shall for each such offence, on conviction thereof before a Police Magistrate or Justice of the Peace, be liable to a penalty not exceeding 10 dollars, payable to the municipality for public school purposes, together with costs, as the Police Magistrate or Justice may think fit.

The regulations also provide :—

(1.) No book shall be authorised as a text-book in any public school until he copyright thereof has been vested in the Education Department.

(2.) Every text-book for public or high schools printed and published in Canada, shall be subject, at any stage of its manufacture, to the inspection and approval of the department in regard to printing, binding and paper ; in case of using any book not published in Canada, the English edition shall be preferred to any other.

(3.) A sample copy of every edition of every authorised book shall be deposited in the Education Department by the publisher, and no edition of any book shall be considered as approved without a certificate from the Minister of Education approving thereof.

* From Mr. J. Millar's *Educational System of the Province of Ontario*, pp. 83, ff.

(4.) Every authorised book shall bear the imprint of the publisher, and shall show upon the cover or title page the authorised retail price, and no part of the book shall be used for advertising purposes, without the written consent of the Department.

(5.) The Education Department may require the publisher of any text-book to make such alterations from time to time as may be deemed expedient; but no alterations in contents, typography, binding, paper or any other material respect, shall, in any case, be made by the publisher, without the consent of the Education Department.

(6.) Every publisher of an authorised text-book shall, before placing any edition of such authorised book upon the market, execute such agreements and give such security for the due fulfilment of these regulations as may be required by the Education Department.

(7.) All authorised text-books may be published by any firm or publishers in Ontario, on the payment to the original publishers of such sum or sums of money as may be agreed upon between the publishers concerned, and the Minister of Education respectively.

(8.) The Minister of Education may, at his discretion, after making full inquiry into the cost of manufacture, reduce the retail price of any authorised text-book; he may also remove such book from the list of authorised text-books, if the publisher fails to comply with the regulations of the Education Department, or if it be considered to be in the public interest so to do.

(9.) In case the Education Department shall at any time recommend any books as aids to the teacher for private reference or study, it is to be distinctly understood that such books are not to be used as text-books by the pupils, and any teacher who permits such books or any other book not authorised as a text-book for the public schools, to be used as such, shall be liable to such penalties as are imposed by the School Act.

The adoption of a uniform series of text-books for the Province has been attended with many advantages. Among them the following may be mentioned:—

1. The cost to pupils has been less than if the selection of text-books were left to each locality.

2. There are better facilities thereby afforded for securing a uniform course of study, and a uniform standard for departmental and university matriculation examinations.

3. The difficulties have been minimised that arise when pupils remove from one school to another.

4. It has, by limiting their responsibilities, tended to render teachers, Inspectors and other school officials more useful in the discharge of their duties.

5. Annoyance and confusion resulting from the frequent changes of text-books by school boards have been avoided.

6. Parents, teachers, Inspectors and trustees are protected from the incessant importunities of book agents and publishing firms.

7. It is a measure of economy to parents and pupils, as they are saved from the too frequent changes of text-books.

To the Education Department has been given the power to authorise text-books for the high and public schools, and for the various institutions for the training of teachers. In preparing and authorising text-books the following objects have been kept in view:—

(1.) To cover the course of study in each subject so far as possible by one text-book.

(2.) To control and regulate the price of each text-book, and thus protect the public as well as act fairly towards the publishers.

(3.) To reduce the price of text-books should it appear to the Department that the profits are excessive.

(4.) To keep up a required standard as regards the binding, typography and general workmanship of the books.

(5.) To encourage Canadian teachers of well-known ability to undertake the preparation of text-books.

(6.) To manufacture, as far as possible, all authorised text-books in the Province.

(7.) To prevent frequent changes by teachers and trustees.

(8.) To reduce the number of text-books. This has been especially kept in view as regards the public schools. In high schools where fewer pupils are affected a choice has been allowed in the case of some departments.

By the Public Schools Act of 1891 it has been provided that the public school board of any city, town or incorporated village may provide free text-books for the pupils. In accordance with the democratic principles of the school system it has been considered preferable to leave a matter of this kind to be decided by the ratepayers themselves for each locality. It is yet too soon to say how far this optional power may be taken advantage of by municipalities.

List of Text Books.

1. The text-books named in Schedules "A" and "B" shall be the authorised text-books for the public schools, for Forms I., II., and III. of collegiate institutes and high schools of the Province of Ontario.

2. The text-books in French or German mentioned in schedule "A" are authorised only for schools where the French or German language prevails, and where the trustees with the approval of the inspector require French or German to be taught in addition to English.

3. The books named in Schedule "B" shall be the authorised text-books in the corresponding subject in the course of study prescribed for the Fifth Form of public schools.

4. All text-books prescribed or required for senior matriculation or for the courses in Form IV. of high schools and collegiate institutes may be used in addition to those mentioned herein.

5. For religious instruction, either the Sacred Scriptures or the Scripture Readings adopted by the Education Department, shall be used by teachers and pupils as prescribed by the regulations of the Education Department

Public Schools—Form I.–IV. (*Schedule A.*)

	$	c.
The Public School Readers.		
First Reader, Part I.	0	10
First Reader, Part II.	0	15
Second Reader	0	25
Third Reader	0	35
Fourth Reader	0	45
Public School Arithmetic	0	25
Public School Geography	0	75
Public School Grammar	0	25
Public School History of England and Canada (new edition)	0	30
Public School Drawing Course—each number (new series)	0	05
Public School Hygiene and Temperance	0	25
Public School Agriculture	0	40
Public School Writing Course—each number to July 1894 (after July, 1894, five cents)	0	06

French-English Readers.	$	c.
First Reader, Part I.	0	10
First Reader, Part II.	0	15
Second Reader	0	25
Third Reader	0	35
Les Grandes Inventions Modernes	0	50
Robert's French Grammar	0	25

German-English Readers.		
Ahn's First German Book	0	25
„ Second „	0	45
„ Third „	0	45
„ Fourth „	0	50
„ First German Reader	0	50
Klotz's German Grammar	0	60

Collegiate Institutes and High Schools. (*Schedule B.*)

English.		
High School Reader	0	60
High School English Grammar	0	75
High School English Composition	0	50
High School Geography	1	00
High School History of England and Canada	0	65
Schmitz's History of Greece and Rome	0	75
Green's Short History of the English People	1	50

Mathematics.		
High School Arithmetic	0	60
High School Algebra	0	75
McLellan's Elements of Algebra	0	75
High School Euclid, McKay (Books I., II., III., 50 cents)	0	75

Classics.		
Henderson and Fletcher's First Latin Book	1	00
Carruthers and Robertson's Primary Latin Book	1	00
Harkness' Introductory Latin Book	0	50
Harkness' Revised Standard Latin Grammar	1	00
Leighton's First Steps in Latin	1	00
Bradley's Arnold's Latin Prose	1	50
Goodwin's Greek Grammar	1	25
Harkness' First Greek Book	0	90

Moderns.		
High School French Grammar	0	75
High School French Reader	0	50
High School German Grammar	0	75
High School German Reader	0	50
Lessons in French, complete (Fasquelles-Sykes)	0	75

Science.		
High School Physics	1	00
High School Botany	1	00
High School Chemistry	0	75

Book-keeping and Drawing.		
High School Book-keeping	0	65
High School Drawing Course—five parts—each	0	15

Dictionaries Recommended.

1. *English*—Stormonth's English Dictionaries (smaller and larger).
   Skeat's Etymological Dictionary (cheap unabridged edition)
   The Concise Imperial Dictionary.

2. *Latin*—Anthon's smaller Latin Dictionary.
   Harper's (Lewis and Scott's) Latin Dictionary.

3. *Greek*—Liddell and Scott's larger and smaller Greek Dictionaries.

4. *French*—Cassell's French and English, and English and French Dictionaries.
   Spiers and Surenne's French and English, and English and French Dictionaries.

5. *German*—Blackley and Friedlander's German and English, and English and German Dictionaries.
   Flügel's German Dictionary.

6. *Antiquities and Mythology*—Anthon's and Smith's.

APPENDIX F.

REGULATIONS FOR THE SCHOOL OF PEDAGOGY.

The following regulations have been prescribed for the School of Pedagogy:—

(1) Only such persons shall be admitted to the provincial School of Pedagogy or its final written examination as shall have completed at least the twenty-first year of their age on or before the close of the session, and as hold at least a high school senior leaving certificate.

(2) Teachers-in-training on admission to the school, and other candidates at the final written examination, shall each pay a fee of 10 dollars.

(3) The following certificate shall be awarded candidates who pass the prescribed written and practical examinations in December and June (or April and December): after a session at the school of Pedagogy, specialists' certificates, high school assistants' certificates, and first class certificates to candidates who have had three years' experience in a public school, or who hold a second class certificate, and without a session at the school of Pedagogy, first class certificates to candidates who, holding a second class certificate, have had two years' successful experience in a public school, and specialists' certificates to candidates who hold high school assistants' or first class certificates.

Duties of Staff.

(1) The principal shall be the chief instructor in the theoretical and critical course, and shall be responsible for the organisation and management of the school. He shall have charge of the teachers-in-training and determine the hours for instruction, observation and practice teaching in the School of Pedagogy. He shall prescribe the duties of the lecturers on methods and shall from time to time be present at their instructions and those of the special instructors, and at the practice teaching of the teachers-in-training. He shall, with the assistance of the lecturers and special instructors, furnish the Minister of Education with the prescribed statement of the standing of each teacher-in-training at the close of the session.

(2) Each lecturer shall develop systematically the best method of dealing with each branch of his department in the various stages of a pupil's progress, and shall, as far as possible, explain and justify his methods on scientific principles, giving model lessons for classes in different stages of

advancement. He shall also criticise the practice teaching of the teachers-in-training in the School of Pedagogy, and shall, by suitable records, provide the means of forming a just estimate of the standing of each teacher-in training.

(3) No certificate or testimonial shall be given to any teacher-in-training or other candidate at the final examination by any of the examiners or members of the staff of the School of Pedagogy.

Duties of Teachers-in-training.

(1) Teachers-in-training shall lodge and board at such houses only as are approved by the principal. Ladies and gentlemen shall not board at the same house. Communication between the sexes is strictly prohibited, except by permission of the principal or one of the lecturers or masters.

(2) Teachers-in-training shall attend regularly and punctually throughout the session, and shall submit to such discipline and perform such duties as may be prescribed by the principal.

(3) The teachers-in-training shall make no presentation to any member of the staff of the School of Pedagogy.

Course of Study and Text Books.

(1) The course of study and training shall be as follows : Psychology, the history and criticism of educational systems, the science of education, lectures with practical illustrations on the best methods of teaching each subject on the programme of studies for high schools, lectures on school organisation and management, observation and practice in the School of Pedagogy ; instruction in reading, temperance and hygiene, writing, drawing, stenography, drill, gymnastics and calisthenics, and such other subjects as may be prescribed by the Minister of Education.

(2) (*a*) In addition to the text books prescribed for collegiate institutes and high schools, the following are authorised for the School of Pedagogy : Quick's Essays on Educational Reformers (International Educational Series, 1890 edition), McLellan's Applied Psychology, Spencer's Education, Landon's School Management, Fitch's Lectures on Teaching, Manuel of Hygiene, and Houghton's Physical Culture.

(*b*) The following are recommended for reference : Mahaffy's Old Greek Education, Compayré's History of Pedagogy, Gill's Systems of Education, Radestock's Habit in Education, Dewey's Psychology, Sully's Teachers' Handbook of Psychology (Appleton), Ladd's Outlines of Physiological Psychology.

Examinations.

(1) Teachers-in-training shall take the following examinations :—(*a*) At east one written examination conducted, during the session, by the staff of the school, on the work of the sessions ; (*b*) final written examination (in December or April), conducted by the staff of the school and such other examiners as the Minister may appoint, in the following subjects, obligatory on all candidates :—Psychology, science of education, history of education, school organisation and management, methods in mathematics, and methods in English. In addition to the foregoing subjects, candidates holding university qualifications shall take methods in Latin, and methods either in Greek or in French and German ; and other candidates, methods in science or classics, or modern languages ; candidates for a commercial specialist's certificate shall take also methods in the commercial subjects ; (*c*) and a final examination in December, in reading and drill, gymnastics and calisthenics for male teachers, and drill and calisthenics for female teachers, conducted by the staff of the school, unless otherwise ordered by the Minister of Education.

APPENDIX G

UNIVERSITY REGULATIONS.

Matriculation,

Matriculation examinations, formerly conducted by the different universities, are now entrusted to examiners selected by the joint board, which is appointed by the Minister of Education and the Senate of the University of Toronto. This examination is held in the beginning of July, and is called the Junior Matriculation Examination. Candidates may also enter by passing the Senior Matriculation Examination (first year) or at the examination of the second year. High school leaving certificates are accepted *pro tanto* for entering the University. The following provisions have been made by the Senate regarding the matriculation examinations :—

All candidates entering at the junior matriculation examination must take the pass subjects in Latin, Mathematics, English History and Geography, and in one of the following groups : (*a*) Greek ; (*b*) French and German ; (*c*) French, and either Physics or Chemistry ; (*d*) German, and either Physics or Chemistry.

Candidates intending to take, during their university course, any one of the following honour departments, viz. : Political Science, Mathematics and Physics, Chemistry and Mineralogy, Natural Sciences, are recommended to take French and German at matriculation, since these languages must be taken in connection with the above-named honour departments. For a similar reason candidates intending to take, during the university course, either the honour departments of Philosophy or that of Oriental Languages, are recommended to take Greek, French and German at junior matriculation.

Regulations Relating to the Pass Course.

The subjects to be taken by those pursuing the pass course, with the options permitted, are set forth in the following schedule :—

First Year	Latin ; English ; History ; Mathematics ; either Greek, or French and German ; any one of the three sciences—Chemistry, Biology, Geology.
Second Year	Latin ; English ; History ; Philosophy ; Physics ; either Greek, or French and German.
Third Year	Latin ; English ; either Greek, or French and German ; any two of the three departments—History and Political Science, Philosophy, Physics.
Fourth Year	Latin ; English ; either Greek, or French and German ; any two of the three departments—Political Science, Philosophy, Mathematics and Physics.

NOTE.—Hebrew may be substituted for French or German in each of the four years.

Undergraduates in the pass course in the third and fourth years may, in lieu of one or more of the subjects prescribed for each of these years, take certain of the following subjects—namely, Biblical Greek, Biblical Literature, Apologetics, and Church History.

Regulations Relating to the Honour Course.

In this course there are eight honour departments—viz. : I. Classics ; II. Modern Languages ; III. Oriental Languages ; IV. Political Science ; V. Philosophy ; VI. Mathematics and Physics ; VII. Chemistry and Mineralogy ; VIII. Natural Sciences.

Candidates pursuing Department II. will be allowed at and after the examination of 1893 to take either Teutonic or Romance Languages in their fourth year.

Candidates pursuing Department VI. are allowed to take either Mathematics or Physics in their fourth year.

Candidates pursuing Department VIII. are allowed to take either Division I. or Division II. in their fourth year.

An undergraduate is entitled to admission to the degree of Bachelor of Arts, if in each year of his course he passes the examination in the pass and honour subjects of one of these departments (except in the department of Political Science, for which the honour subjects only are required), and also the pass examinations in the subjects and at the respective times mentioned in the following schedule :—

Undergraduates to the honour departments of Philosophy and Oriental Languages may, in the third year, substitute Biblical Literature or Church History for History. Undergraduates in the honour department of Philosophy may also substitute Biblical Greek for the pass Classical Greek (Plato) to be taken in the third year, and Biblical Literature or Apologetics for the pass Economics for the fourth year. Undergraduates in the honour department of Oriental Languages may also substitute Biblical Greek for the pass Classical Greek of the third and fourth years. Undergraduates in the honour department of Political Science may substitute Church History for the pass English of the second year, and Biblical Greek for the pass French or German of the third year. Those exercising these options must present certificates of having attended lectures and passed examinations in the subjects so selected at an affiliated or confederated college or university other than University College. The minimum for passing at such examinations must not be less than the minimum required at the University examinations of third year. These examinations do not count for honours.

In the honour department of Philosophy two distinct examinations are held in the fourth year upon the two systems of philosophy taught in the confederating Arts Colleges.

A candidate for honours in any of these departments is required each year to take the pass papers set in the subjects of his department for that year, except in the department of Political Science, in which only the honour papers are required.

Candidates in the honour subjects of Physics, Chemistry, Biology, and Mineralogy and Geology, will be ranked in the class lists on practical work done in the laboratories of the respective departments during the session ; and no candidate will be allowed to proceed to examination in any of these honour subjects unless he presents to the registrar a certificate from the professor that he has attained honour standing in the practical work of that subject.

Fees.

The following fees are payable :—		Dols
For each examination after matriculation		5
For change of faculty		5
For admission *ad eundem statum*		6
For the Degree of B.A.		10
For the Degree of M.A.		20
For admission *ad eundem gradum*	B.A.	20
	M.A.	20
For admission to a higher year on the certificate of the head of an affiliated college		5
For dispensation from attendance at lectures in an affiliated college		2
For certificates of honour	(each)	1
Annual library fee		2

Matriculated undergraduates who are registered students of University College, or at any federating university or college, may attend lectures of university professors and lecturers in the Faculty of Arts without payment or fees, except those imposed for laboratory work ; but such students must enter their name with the Registrar of the University.

Laboratory fees vary from about two to twenty-five dollars, according to the number of sub-departments. The library fee is two dollars.

Term Work.

Candidates in pass subjects in the Faculty of Arts shall be arranged in the annual class lists in three grades, A, B and C; the minimum for A being seventy-five per cent. of the marks, and for B fifty per cent.; all under fifty per cent. who pass shall be placed in C.

Reports of attendance at pass lectures in the first and second years shall be made in all departments except those of Chemistry, Natural Science and Physics, and marks for such attendance shall be assigned in connection with the May examinations as follows.

	Marks.
For attendance at four-fifths and over -	20
„ two-thirds and over -	13
„ one-half and over -	7

No students attending less than one-half the lectures shall receive any marks for attendance.

Reports on term pass work in the first and second years shall be made in all deparments except those of Chemistry, Natural Science and Physics. In the department of English five essays at least shall be required during the session from each student; and the reports on term work in that department shall be based on the essays. In other departments the report on term work shall be based on those parts of the work which the professor or lecturer may deem most appropriate as tests of proficiency. The maximum number of marks to be assigned for term work in connection with the May Examination shall be thirty, and no candidate earning less than ten marks shall receive any marks for term work.

Matriculation Scholarships.

Through the liberality of several persons, including the Hon. Edward Blake, M.P., Chancellor of the University, who has given the sum of twenty thousand dollars as a fund for an endowment for junior matriculation scholarships, valuable inducements are offered to deserving students desiring to take a course in arts in the Provincial University. These scholarships vary in value from 25 to 190 dollars. A large number of scholarships, medals and prizes are also awarded in the different years of the course.

University College Fees.

Graduates in Arts, who have pursued the undergraduate course in University College, may attend lectures free; but this privilege does not exempt them from laboratory and other special fees.

For regular students in Arts, "a course of lectures" means a continuous course of instruction offered to matriculated students in Arts in any one year in any subject.

"A partial course of lectures" means any special course or any subdivision, complete in itself, of a course of lectures as above defined.

"A matriculated student in Arts" means a student who is matriculated in the University, and enrolled in University College, and whose name is entered with the Registrar of the University.

"An occasional student" includes every student not being a matriculated student under the above definition, in whose case the Lieutenant-Governor in Council is by law authorised to determine fees for courses of lectures on the report of the Council of University College.

Every matriculated student in Arts shall, on each year's enrolment in University College, pay an enrolment fee according to the following table

which fee shall include all instruction for which fees are by law chargeable, except laboratory supply charges and library fees :—

		Dols.
First Year	- Any course or department - - -	25
Second Year	- Any course or department - - -	25
Third Year	- Chemistry and Mineralogy - -	20
	Natural Sciences - - - -	20
	Any other course or department -	25
Fourth Year	- Chemistry and Mineralogy or Physics	20
	Biology - - - - -	15
	Any other course or department -	25

The annual enrolment fee of a matriculated student in Arts, taking under the regulations more than one honour course, shall be 25 dollars only.

Statistics.

	Dols.
Value of land reservation for building - - - - -	478,000
„ Buildings - - - - - - - - -	640,000
„ Library books, apparatus, etc. - - - -	120,000
„ Unoccupied land - - - - - - -	1,000,000
„ Land leased - - - - - - - -	326,000
„ Investments - - - - - - - -	1,000,000
Annual income - - - - - - - -	118,000
Graduates in Arts (Toronto, 1,660 ; Victoria, 644) - - -	2,304
„ Medicine (Toronto, 808; Victoria, 937, of whom 80 are graduates in both) - - - -	1,665
„ Law (Toronto, 245 ; Victoria, 98) - - -	343
„ Engineering - - - - - - -	5
„ Agriculture - - - - - -	33
„ Dentistry - - - - - - - -	85
„ Pharmacy - - - - - - - -	22

Volume 1 of Special Reports (1896-7), contains the following Papers:—

1. Public Elementary Education in England and Wales, 1870-1895.
   By Messrs. M. E. Sadler and J. W. Edwards.
2. English Students in Foreign Training Colleges.
   By Miss L. Manley, Miss Williams, and Mr. H. L. Withers.
3. Brush Work in an Elementary School (with illustrations).
   By Mr. Seth Coward.
4. The A B C of Drawing: an inquiry into the principles underlying elementary instruction in Drawing (with illustrations).
   By Mr. Ebenezer Cooke.
5. Domestic Economy Teaching in England.
   By Mrs. Pillow.
6. Technical Education for Girls.
   By Miss A. J. Cooper.
7. The Secondary Day School attached to the Battersea Polytechnic, London —an experiment in the co-education of boys and girls.
   By Mr. Sidney H. Wells.
8. The History of the Irish System of Elementary Education.
   By Mr. M. E. Sadler.
9. The National System of Education in Ireland.
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